# WATER INFRASTRUCTURE FINANCE AUTHORITY OF ARIZONA

# WEDNESDAY, JULY 19, 2023 Water Conservation Grant Fund Committee Meeting 1:30 PM

Water Infrastructure Finance Authority
100 N. 7th Avenue, Suite 100
Camelback Conference Room
Phoenix, AZ 85007
(Public access will be permitted starting at 8:45 AM)

# Public Zoom Meeting: Committee Members please join using the Panelist Invitation Link

#### Join on your computer or mobile:

https://azcommerce.zoom.us/j/96170687390 Meeting ID: 961 7068 7390

#### Join By Phone:

Call in Number: (253) 205-0468 Meeting ID: 961 7068 7390

#### FINAL AGENDA

#### **Call Meeting to Order**

- 1. Kim Schonek, Chairperson, will call the Water Conservation Grant Fund Committee Meeting to order with a call for quorum.
- 2. Recordings of the Water Conservation Grant Fund public meeting held on June 29, 2023, are available here <a href="https://www.azwifa.gov/news/public-meetings">https://www.azwifa.gov/news/public-meetings</a> As such, written meeting minutes will not be provided, and approval is not necessary for the public portion of the past committee meeting.

#### **Update. Discussion or Presentation**

- 3. **Report:** Director's Report Chuck Podolak will lead the discussion
- 4. **Review & Discuss:** Water Conversation Grant Fund Application Status Chuck Podolak and Lindsey Jones will lead the discussion

WIFA's Mission

To ensure the sustainability of Arizona's present and future water supply through financial investments in effective augmentation, conservation, reuse, and water quality actions.

- 5. Turf Removal Projects for Review, Discussion & Possible Action: Recommend Approval of:
  - a. Grant Application WC1-037-2023 City of Phoenix WCGF \$3,000,000 *Lindsey Jones will lead the discussion*
  - b. Grant Application WC1-008-2023 City of Chandler WCGF \$975,000 *Lindsey Jones will lead the discussion*
  - c. Grant Application WC1-016-2023 Town of Gilbert WCGF \$3,000,000 *Lindsey Jones will lead the discussion*
  - d. Grant Application WC1-018-2023 City of Glendale WCGF \$3,000,000 *Lindsey Jones will lead the discussion*
  - e. Grant Application WC1-029-2023 City of Peoria WCGF \$2,523,750 Lindsey Jones will lead the discussion
  - f. Grant Application WC1-051-2023 City of Tempe WCGF \$80,244.54 *Lindsey Jones will lead the discussion*
- 6. Advanced Meter Projects for Review, Discussion & Possible Action: Recommend Approval of:
  - a. Grant Application WC1-002-2023 Apache Junction Water district WCGF \$1,065,845 *Lindsey Jones will lead the discussion*
  - b. Grant Application WC1-010-2023 Town of Clarkdale WCGF \$562,500 *Lindsey Jones will lead the discussion*
  - c. Grant Application WC1-023-2023 Maricopa Consolidated Domestic Water Improvement District WCGF \$128,466 *Lindsey Jones will lead the discussion*
  - d. Grant Application WC1-025-2023 Metropolitan Domestic Water Improvement District WCGF \$3,000,000 *Lindsey Jones will lead the discussion*
  - e. Grant Application WC2-097-2023 City of San Luis WCGF \$2,017,065.21 *Lindsey Jones will lead the discussion*
  - f. Grant Application WC1-049-2023 Town of Snowflake WCGF \$732,418.50 Lindsey Jones will lead the discussion
- 7. Agriculture System Upgrade Projects for Review, Discussion & Possible Action: Recommend approval of:
  - a. Grant Application WC2-073-2023 Bonneville Environmental Foundation (Partnering with the Colorado River Indian Tribes (CRIT)) WCGF \$3,000,000 *Lindsey Jones will lead the discussion*
  - b. Grant Application WC1-004-2023 Buckeye Water Conservation and Drainage District WCGF \$3,000,000– *Lindsey Jones will lead the discussion*
  - c. Grant Application WC1-024-2023 Maricopa Water District– WCGF \$222,786 Lindsey Jones will lead the discussion
  - d. Grant Application WC1-026-2023 New Magma Irrigation District WCGF \$187,752 *Lindsey Jones will lead the discussion*

# Call to the Public

8. *Call to the Public:* This is the time for the public to comment. Members of the Committee may not discuss items that are not specifically identified on the agenda. Pursuant to A.R.S. § 38-431.01(H), action taken as a result of public comment will be limited to directing staff to study the matter, responding to any criticism or scheduling the matter for further consideration and decision at a later date. Members of the public wishing to address the committee must fill out and submit a request on the provided form that is available at sign in for the meeting. Comments will be limited to three minutes.

Members of the public attending virtually that wish to comment may do so by completing the public comment card available by following the link below:

Request to Address the Committee: https://forms.gle/TZsbgqB8mkTNs3fF8

Please note that public comments on individual Water Conservation Grant Fund proposals must be submitted via email to be considered as a part of the Committee's recommendations. Comments on grant proposals should be emailed to <a href="mailto:contact@azwifa.gov">contact@azwifa.gov</a> by 5:00 pm on July 18, 2023.

# Meeting Conclusion & Adjournment of Public Meeting

#### 9. New Business/Issues:

• Next Water Conservation Grant Fund Committee Meeting Date: September 20, 2023, in Phoenix, Arizona – Kim Schonek will lead the discussion

#### 10. Adjournment

#### **Notes on Proceedings**

WIFA is committed to complying with the Americans with Disabilities Act. Persons with a disability may request reasonable accommodation, such as a sign language interpreter, by contacting WIFA at (602) 364-1310. Requests should be made as early as possible to allow time to arrange the accommodation.

Background material provided to the Committee that is not otherwise exempt by law from public inspection is available for inspection on WIFA's website at <a href="https://www.azwifa.gov/news/public-meetings">https://www.azwifa.gov/news/public-meetings</a>.

The Committee may vote to go into executive session, which will not be open to the public, for any item listed on the agenda, for any purpose as authorized under A.R.S. § 38-431.03. The executive session is not open to the public and all legal action will take place in a meeting that is open to the public.

At its discretion, the Committee may consider and act upon any agenda item out of order. One or more members may participate via teleconference. The agenda for the meeting is subject to change up to 24 hours before the meeting. All matters on the agenda may be discussed, considered and subject to action by the Committee. The Committee reserves the right to table any item on the agenda.

# Agenda Item 3

# **AGENDA ITEM:**

Director's Report

# **ACTION REQUIRED:**

Informational Item

# **PREVIOUS ACTION:**

None

# **STAFF CONTACT:**

Chuck Podolak

# **ATTACHMENTS:**

None

# **STAFF COMMENTS:**

None

# Agenda Item 4

#### **AGENDA ITEM:**

Water Conversation Grant Fund Application Status

# **ACTION REQUIRED:**

Review & Discuss

# **PREVIOUS ACTION:**

None

# **STAFF CONTACT:**

Lindsey Jones

# **ATTACHMENTS:**

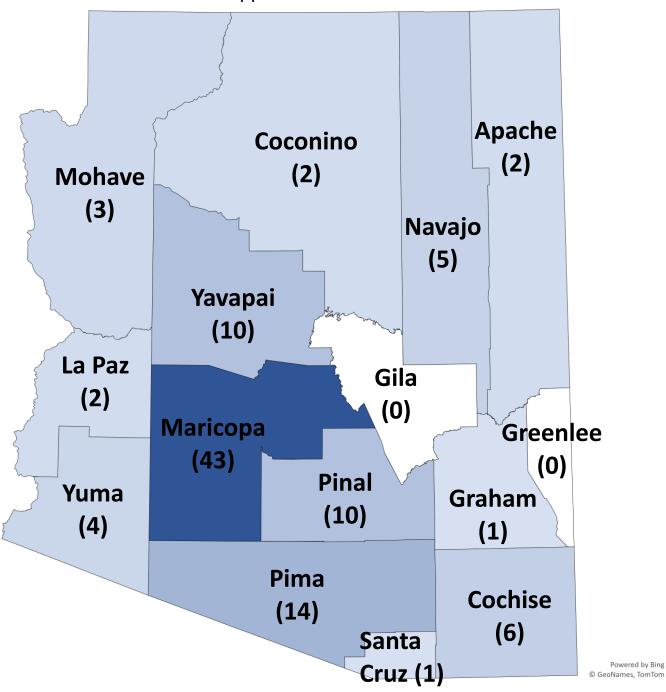
- WCGF Maps and charts
- Water Conservation Applicant Summary List
- II.17.1 WCGF Evaluation and Award Procedure

#### **STAFF COMMENTS:**

None

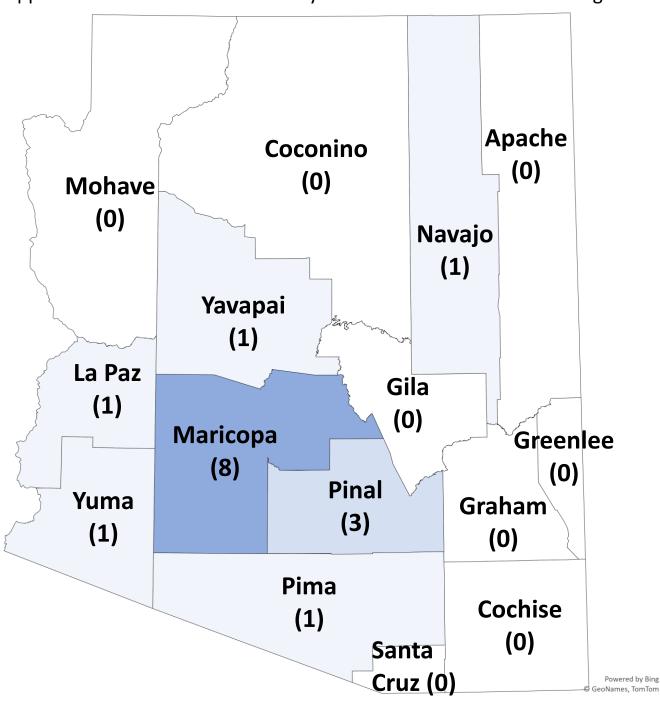


All Applications Received



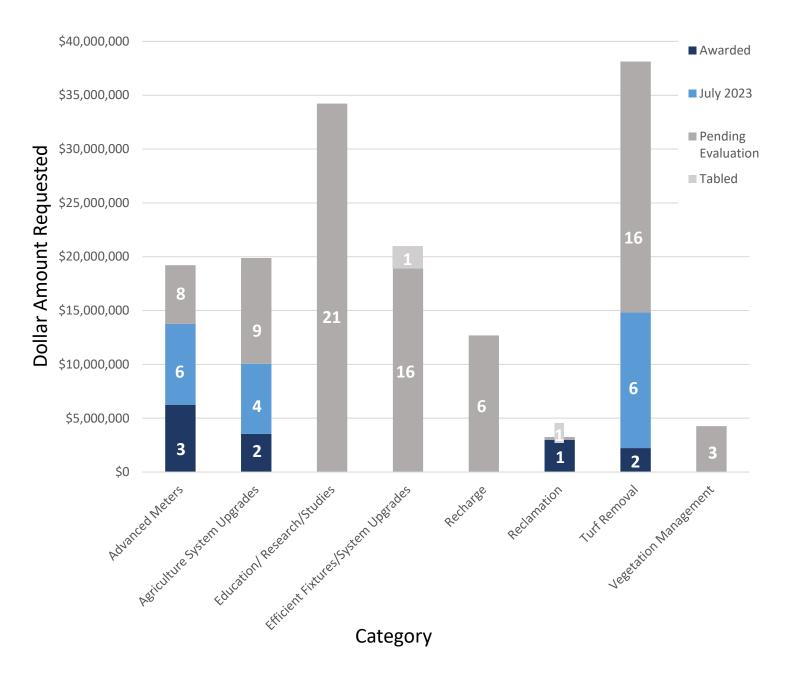
<sup>\*</sup>Two WCGF applications received with All Counties selected for the project/program location not displayed on map
\*\* Three applications had multiple counties including Maricopa, Pinal, Yavapai, Yuma, Navajo, Coconino,
and Cochise Counties

**WCGF - July 2023**Applications for Consideration – July 2023 WCGF Committee Meeting





# **Applications Status**



<sup>\*</sup>Note: Several applications listed multiple types of conservation activities. For simplicity in this chart, they are being represented by one category type.



# **Water Conservation Grant Fund**

July 2023

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
	Į.	Advanced Meter	s			
Tucson City of	Automated Metring Infrastructure (AMI) Program Phase 1	Advanced Meters	Pima	\$3,000,000.00	Awarded	Nov-23
Prescott City of	Water Meter Replacement Program	Advanced Meters	Yavapai	\$3,000,000.00	Awarded	Nov-23
Alpine Domestic Water Improvement District	Water Meter Upgrade	Advanced Meters	Apache	\$250,000.00	Awarded	Nov-23
San Luis City of	Advanced Metering Infrastructure (AMI) Implementation Program	Advanced Meters	Yuma	\$2,017,065.21	WCGF Agenda July 2023	Dec-23
Apache Junction Water District	Advanced Metering Infrastructure Program	Advanced Meters	Pinal	\$1,065,845.00	WCGF Agenda July 2023	Nov-23
Maricopa Consolidated Domestic Water Improvement District	Automated Meter Reading Installation Project	Advanced Meters	Pinal	\$128,466.00	WCGF Agenda July 2023	Nov-23
Clarkdale Town of	Clarkdale Cellular Water Meter Upgrades Program	Advanced Meters	Yavapai	\$562,500.00	WCGF Agenda July 2023	Nov-23
Metropolitan Domestic Water Improvement District	Metro Main Advanced Metering Infrastructure (AMI) Implementation and WaterSmart Customer Platform	Advanced Meters	Pima	\$3,000,000.00	WCGF Agenda July 2023	Nov-23
Snowflake Town of	System wide water meter replacement program with new meters and AMI radio read modules.	Advanced Meters	Navajo	\$732,418.50	WCGF Agenda July 2023	Nov-23
Global Water- Farmers Water Company, Inc.	Advanced Metering Infrastructure (AMI) Program	Advanced Meters	Pima	\$1,600,000.00	Pending Evaluation	Dec-23
Papago Butte Domestic Water Improvement District	AMR/AMI Water Meter Installation Project	Advanced Meters	Pinal	\$62,004.00	Pending Evaluation	Nov-23
Kingman City of	City of Kingman Automated Meter Reading Program	Advanced Meters	Mohave	\$300,000.00	Pending Evaluation	Dec-23
Cup of Gold Water Company, Inc.	Cup of Gold Water Company Mains Replacement Program	Advanced Meters	Yavapai	\$1,875,000.00	Pending Evaluation	Dec-23

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
Cup of Gold Water Company, Inc	Cup of Gold Water Company Meter Replacement Project	Advanced Meters	Yavapai	\$28,125.00	Pending Evaluation	Dec-23
Mesa City of	Mesa's Non-Residential Water Conservation Program	Advanced Meters	Maricopa	\$916,300.00	Pending Evaluation	Dec-23
Springerville Town of	Springerville AMR Meters	Advanced Meters	Apache	\$524,025.00	Pending Evaluation	Nov-23
Pomerene DWID	Water Conservation Efforts	Advanced Meters	Cochise	\$156,000.00	Pending Evaluation	Dec-23
	Agricu	lture System Up	grades			
Verde Natural Resource Conservation District	Camp Verde Irrigation Piping Program	Agriculture System Upgrades	Yavapai	\$2,998,732.00	Awarded	Nov-23
San Carlos Irrigation and Drainage District	SCIDD Phased System Improvements Program: Little Mountain Spill Water Conservatory Project	Agriculture System Upgrades	Pinal	\$555,658.40	Awarded	Nov-23
Maricopa Water District	Beardsley Canal Flume and Control Gates Improvements Project	Agriculture System Upgrades	Maricopa	\$250,000.00	WCGF Agenda July 2023	Nov-23
Buckeye Water Conservation and Drainage District	BWCDD Irrigation District Modernization and Water Storage Program: Phase I Diversion Intake Structure	Agriculture System Upgrades	Maricopa	\$3,000,000.00	WCGF Agenda July 2023	Nov-23
Bonneville Environmental Foundation Partnering with CO River Indian Tribes	Irrigation infrastructure conversion from flood to cost-effective, water- efficient micro-irrigation on the Colorado River Indian Tribes (CRIT) Farms	Agriculture System Upgrades	La Paz	\$3,000,000.00	WCGF Agenda July 2023	Dec-23
New Magma Irrigation District	Upgraded Flow Control Gates and Turnout Valves Project	Agriculture System Upgrades	Pinal	\$250,000.00	WCGF Agenda July 2023	Nov-23

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
Buckeye WCDD	BWCDD System Modernization Program - Phase IV: Lateral 67 & 68 Terminal Spill & Storage Improvement	Agriculture System Upgrades	Maricopa	\$1,575,861.29	Pending Evaluation	Dec-23
Saint David Irrigation District	Canal Efficiency Construction, Phase 1	Agriculture System Upgrades	Cochise	\$3,000,000.00	Pending Evaluation	Nov-23
Saint David Irrigation District	Canal Efficiency Feasibility	Agriculture System Upgrades	Cochise	\$3,000,000.00	Pending Evaluation	Nov-23
Roosevelt Irrigation District	Conservation through Automation Program (CTAP)	Agriculture System Upgrades	Maricopa	\$1,906,280.85	Pending Evaluation	Nov-23
New Magma Irrigation District	NMID Modernization: Phase 2 - Flow Meters, Check Valves, Liner Sealing, and Xeriscape Project	Agriculture System Upgrades	Pinal	\$231,149.62	Pending Evaluation	Dec-23
Paloma Irrigation and Drainage District	PIDD System Modernization Program - Phase III: Lateral D Modernization for Total Channel Control	Agriculture System Upgrades	Maricopa	\$2,071,497.00	Pending Evaluation	Nov-23
Native Seeds/SEARCH Partners with Pima County	Resilient AG Infrastructure for Native Seeds (RAINS)	Agriculture System Upgrades	Pima	\$250,000.00	Pending Evaluation	Dec-23
San Carlos IDD	SCIDD Phased Modernization and Rehabilitation Program: Ashurst- Hayden Sluice Gate Modernization	Agriculture System Upgrades	Pinal	\$441,546.00	Pending Evaluation	Dec-23
Verde Natual Resource Conservation District	Soil Moisture Monitoring and Irrigation Optimization for Agricultural Water Users	Agriculture System Upgrades	Yavapai	\$177,760.00	Pending Evaluation	Nov-23
Roosevelt Irrigation District	Water Savings, Storage and Electrical Demand Management Project (WSSP)	Agriculture System Upgrades	Maricopa	\$170,356.59	Pending Evaluation	Dec-23

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
	Education	on/ Research,	/Studies			
Sierra Vista City of	(Re)charging Ahead: A Program to Implement the Cochise Conservation and Recharge Network	Education/ Research/Studies	Cochise	\$1,460,000.00	Pending Evaluation	Nov-23
Peoria City of	AMI Implementation Study & Pilot Program	Education/ Research/Studies	Maricopa	\$3,000,000.00	Pending Evaluation	Nov-23
Sonoran Institute Partnering with ADEQ	Aquifer recharge, river restoration, and community engagement in Arizona's Santa Cruz River	Education/ Research/Studies	Santa Cruz	\$1,673,534.00	Pending Evaluation	Dec-23
University of Arizona, Board of Regents	Arizona County and Community Level Water Conservation Factsheets	Education/ Research/Studies	All	\$175,069.00	Pending Evaluation	Nov-23
Yuma City of	City of Yuma Water Conservation Program	Education/ Research/Studies	Yuma	\$3,000,000.00	Pending Evaluation	Nov-23
Quantum Leap Productions, Inc. Partners with City of Fountain Hills	Downriver - An Arizona Public Education Program	Education/ Research/Studies	All	\$2,140,770.70	Pending Evaluation	Dec-23
Gary Woodard – Water Resources Consulting Partnering with City of Chandler	Enhanced Water Efficiency Audits for Government Facilities	Education/ Research/Studies	Maricopa	\$340,000.00	Pending Evaluation	Nov-23
AZ Board of Regents	Fostering Water Conservation through Algae Solutions for AZ farms	Education/ Research/Studies	Maricopa	\$3,000,000.00	Pending Evaluation	Dec-23
Creighton Elementary School District	Kennedy Elementary School Water Conservation program	Education/ Research/Studies	Maricopa	\$3,000,000.00	Pending Evaluation	Nov-23
Phoenix City of	Multifamily Water Efficiency Checkups - WERF	Education/ Research/Studies	Maricopa	\$3,000,000.00	Pending Evaluation	Nov-23
Flagstaff City of	Nonrevenue Water Audit Management Program	Education/ Research/Studies	Coconino	\$151,300.00	Pending Evaluation	Dec-23
Phoenix City of	Phoenix Water Conservation Corps	Education/ Research/Studies	Maricopa	\$3,000,000.00	Pending Evaluation	Nov-23

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
Marana Town of	Pilot Project to expand Water Conservation Program for Marana Water Department	Education/ Research/Studies	Pima	\$250,000.00	Pending Evaluation	Nov-23
University of Arizona, Board of Regents	Portable low-energy technology to desalinate brackish well water and conserve Colorado river water	Education/ Research/Studies	Pima	\$249,965.00	Pending Evaluation	Nov-23
Watershed Management Group Partnering with Pima County	Private Groundwater User Water Conservation Program	Education/ Research/Studies	Pima	\$2,582,093.00	Pending Evaluation	Nov-23
Avondale City of	Reduce Your Use!	Education/ Research/Studies	Maricopa	\$66,000.00	Pending Evaluation	Dec-23
Peoria City of	Remote Sensing Analysis to Assist Water Conservation Effort	Education/ Research/Studies	Maricopa	\$250,000.00	Pending Evaluation	Nov-23
Friends of the Verde River	River Friendly Living - Camp Verde	Education/ Research/Studies	Yavapai	\$250,000.00	Pending Evaluation	Nov-23
Watershed Management Group Partnering with City of Tucson Ward 6	Sustainable Desert Living & Water Harvesting Capacity Building Program	Education/ Research/Studies	Pima	\$2,124,848.44	Pending Evaluation	Dec-23
Yuma County of	Yuma County Water Conservation Program	Education/ Research/Studies	Yuma	\$1,500,000.00	Pending Evaluation	Nov-23
	Efficient Fi	xtures/Systen	n Upgrad	es		
Pima County Facilities Management	Pima County Water Conservation Initiative: Efficient Fixture Replacement Program	Efficient Fixtures/System Upgrades	Pima	\$2,054,017.00	Tabled for future consideration	Nov-23
Bonneville Environmental Foundation Partnering with City of Phoenix	Cooling Water Conservation Program	Efficient Fixtures/System Upgrades	Maricopa	\$2,990,709.35	Pending Evaluation	Nov-23
AZ Water Co	Free Water Conservation Kit Project	Efficient Fixtures/System Upgrades	Pinal	\$34,667.51	Pending Evaluation	Dec-23

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
Phoenix City of	High Efficiency Toilet Replacement and Smart Irrigation Controller Rebate	Efficient Fixtures/System Upgrades	Maricopa	\$105,000.00	Pending Evaluation	Nov-23
AZ Water CO	High-Efficiency Toilet Rebate	Efficient Fixtures/System Upgrades	Pinal	\$355,500.00	Pending Evaluation	Dec-23
Pinetop-Lakeside Town of	Mountain Meadow Recreation Complex Water Tank	Efficient Fixtures/System Upgrades	Navajo	\$250,000.00	Pending Evaluation	Dec-23
Peoria City of	Peoria Water Reservoir Conservation Program	Efficient Fixtures/System Upgrades	Maricopa	\$2,332,500.00	Pending Evaluation	Nov-23
Snowflake Town of	Replace 3,500-ft of leaking 2" galvanized waterline with new 6" PVC waterline	Efficient Fixtures/System Upgrades	Navajo	\$600,450.00	Pending Evaluation	Nov-23
Tohono O'odham Utility Authority	TOUA Water Loss Reduction Program	Efficient Fixtures/System Upgrades	Pima	\$697,908.30	Pending Evaluation	Dec-23
Snowflake Town of	Upgrade of Municipal Golf Course Irrigation System	Efficient Fixtures/System Upgrades	Navajo	\$250,000.00	Pending Evaluation	Dec-23
Buckeye City of	Valencia Water System Conservation Program	Efficient Fixtures/System Upgrades	Maricopa	\$3,000,000.00	Pending Evaluation	Dec-23
Campe Verde Town of	Water & Wastewater Conservation and Reuse Program - Phase 2a	Efficient Fixtures/System Upgrades	Yavapai	\$3,000,000.00	Pending Evaluation	Nov-23
Central Arizona College	Water Cooling Towers Water Reduction Project	Efficient Fixtures/System Upgrades	Pinal	\$141,124.50	Pending Evaluation	Dec-23

6

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
Chandler City of	Water Efficient Technology Rebate Program (Commercial, Industrial, HOA, Multi-family)	Efficient Fixtures/System Upgrades	Maricopa	\$1,500,000.00	Pending Evaluation	Nov-23
Kingman City of	Water Resource and Low-Flow Fixture Program Manager	Efficient Fixtures/System Upgrades	Mohave	\$337,380.75	Pending Evaluation	Dec-23
Buckeye City of	West Phoenix Estates Water Conservation Program	Efficient Fixtures/System Upgrades	Maricopa	\$3,000,000.00	Pending Evaluation	Dec-23
Willcox City of	Willcox Water System Stewardship Program - Critical Infrastructure Schedule 2023	Efficient Fixtures/System Upgrades	Cochise	\$311,250.00	Pending Evaluation	Dec-23
		Recharge				
Mohave CO Flood Control District	Hualapia Aquifer Infilltration Basins	Recharge	Mohave	\$3,000,000.00	Pending Evaluation	Nov-23
Buckskin Sanitary District	Injection Wells Installation	Recharge	La Paz	\$250,000.00	Pending Evaluation	Nov-23
Metro DWID	Metro Water District Northwest Recharge, Recovery, and Delivery System (NWRRDS)	Recharge	Pima	\$3,000,000.00	Pending Evaluation	Dec-23
Upper Verde River Watershed Protection Coalition, fiscal agent Town of Prescott Valley	Optimization of groundwater recharge in the Upper Verde River Watershed	Recharge	Yavapai	\$3,190,000.00	Pending Evaluation	Nov-23
Marana Town of	Santa Cruz River Effluent Recharge Program	Recharge	Pima	\$3,000,000.00	Pending Evaluation	Nov-23
El Mirage City of	Water Production Facility Conservation Project	Recharge	Maricopa	\$250,000.00	Pending Evaluation	Nov-23

7

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
		Reclamation				
Yuma City of	City of Yuma Irrigation Standards Modernization	Reclamation	Yuma	\$3,000,000.00	Awarded	Nov-23
Pima County	Pima County Arthur Pack Park Water Conversion Project	Reclamation	Pima	\$250,000.00	Pending Evaluation	Nov-23
		<b>Turf Removal</b>				
Goodyear City of	Commercial, Institutional, Industrial, and HOA Lawn Removal Incentive	Turf Removal	Maricopa	\$74,000.00	Awarded	Nov-23
Williams Unified School District #2	Williams Athletic Fields Water Conservation Program	Turf Removal	Coconino	\$2,158,500.00	Awarded	Nov-23
Glendale City of	City of Glendale Right Of Way Xeriscape Landscape Program	Turf Removal	Maricopa	\$3,000,000.00	WCGF Agenda July 2023	Nov-23
Peoria City of	City of Peoria Parks and Recreation Water Conservation Program	Turf Removal	Maricopa	\$2,523,750.00	WCGF Agenda July 2023	Nov-23
Phoenix City of	Commercial and Residential Turf Conversion Rebates	Turf Removal	Maricopa	\$3,000,000.00	WCGF Agenda July 2023	Nov-23
Chandler City of	Grass Removal Rebate Program (Multi- family, HOA and Commercial Property)	Turf Removal	Maricopa	\$975,000.00	WCGF Agenda July 2023	Nov-23
Gilbert Town of	Municipal Grass Removal Program	Turf Removal	Maricopa	\$3,000,000.00	WCGF Agenda July 2023	Nov-23
Tempe City of	Nonfunctional Turf Removal at City Parks	Turf Removal	Maricopa	\$80,244.54	WCGF Agenda July 2023	Nov-23
Higley Unified School District	Artificial Turf	Turf Removal	Maricopa	\$3,000,000.00	Pending Evaluation	Nov-23
Chandler Unified School District #80	Chandler Unified Campus Water Reduction and Conservation Education Program	Turf Removal	Maricopa	\$2,402,117.00	Pending Evaluation	Dec-23

8

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
Peoria City of	City of Peoria Parks and Recreation Water Conservation Program	Turf Removal	Maricopa	\$2,100,000.00	Pending Evaluation	Dec-23
Surprise City of	City of Surprise Turf Removal Project	Turf Removal	Maricopa	\$229,468.00	Pending Evaluation	Dec-23
Tucson City of	City of Tucson Parks Turf Replacement & Non-functional Turf Removal Rebate	Turf Removal	Pima	\$1,500,400.00	Pending Evaluation	Dec-23
Surprise City of	Enhanced Water Conservation Rebate Program	Turf Removal	Maricopa	\$159,100.00	Pending Evaluation	Nov-23
Scottsdale City of	Expansion of residential grass removal landscape conversion REBATE activity	Turf Removal	Maricopa	\$250,000.00	Pending Evaluation	Nov-23
Glendale City of	Glendale Water Wise Rebate Program for Residential and Non-Residential Customers	Turf Removal	Maricopa	\$450,000.00	Pending Evaluation	Nov-23
Mesa City of	Mesa Parks' Non-Functional Turf Removal	Turf Removal	Maricopa	\$1,061,626.00	Pending Evaluation	Dec-23
Chandler City of	Non-Functional Grass Removal Program (Public Property)	Turf Removal	Maricopa	\$3,000,000.00	Pending Evaluation	Nov-23
Tempe City of	Nonfunctional Turf Removal at Arizona State University	Turf Removal	Maricopa	\$3,000,000.00	Pending Evaluation	Nov-23
Arizona State University	Non-functional turf removal at ASU Polytechnic and West Campuses	Turf Removal	Maricopa	\$1,854,110.00	Pending Evaluation	Dec-23
Arizona State University	Non-functional turf removal at ASU Research Park and Papago Golf Course	Turf Removal	Maricopa	\$1,690,004.91	Pending Evaluation	Dec-23
Snowflake Unified School District #5	Snowflake Athletic/Educational Facility Water Conservation Program	Turf Removal	Navajo	\$2,249,986.77	Pending Evaluation	Dec-23
Peoria City of	Sunrise Mountain High School Multi- Purpose Field Turf Reduction Project	Turf Removal	Maricopa	\$250,000.00	Pending Evaluation	Nov-23
Willcox City of	Willcox Pioneer Cemetary Turf Removal	Turf Removal	Cochise	\$118,715.00	Pending Evaluation	Dec-23

Applicant	Program/Project Title	Category	County	Amount Requested	Status	Evaluation Due Date
	Vege	etation Manage	ment			
Eastern AZ College	Monster Water Conservation and Education Program	Vegetation Management	Graham	\$2,762,108.04	Pending Evaluation	Dec-23
Salt River Project Agricultural Improvement and Power District	Beaver Creek Watershed and Wildlife Habitat Enhancement Project, Phase 1 & 2	Vegetation Managment	Yavapai	\$250,000.00	Pending Evaluation	Nov-23
Ecoculture Partnering with Scottsdale Community College	Lower Salt River Restoration Program	Vegetation Managment	Maricopa	\$1,247,933.35	Pending Evaluation	Nov-23

Total Requested \$152,597,741.62 # of Applications 105

<sup>\*</sup>Note: Several applications listed multiple types of conservation activities and/or multiple counties. For simplicity in this table they are being represented by one category type and one county location.



# PROCEDURE II.17.1 – WATER CONSERVATION GRANT FUND EVALUATION AND AWARD PROCEDURE

1 OVERVIEW		
Director		Date
CLA		Jul 10, 2023
Approval:		
	1,7=0,7=0=0	
EFFECTIVE DATE:	7/10/2023	
DOCUMENT NUMBER:	II.17.1	

The purpose of this procedure is to provide instructions and best practices related to the associated Policy II.17: Water Conservation Grant Fund Policy.

#### 2. ROLES AND RESPONSIBILITIES

- **2.1** Staff shall accept and review applications for the WCGF, present grant application materials to the WCGF Committee and WIFA Board and assist grant recipients post-award.
- 2.2 Staff shall maintain a grant application portal and provide applicants technical assistance as needed during the application process. Staff may follow up with grant applicants to ask clarifying questions or to correct technical errors.
- **2.3** Staff shall determine the eligibility of grant proposals based on the statutory eligibility criteria.
- **2.4** Staff shall prepare a technical review for the WCGF Committee and the draft grant resolutions for the WIFA Board.
- 2.5 Staff shall provide the committee with a fact sheet for every category type which shall include facts, figures, and benchmarking metrics relevant for that category type. Staff shall also provide the committee with the attached Committee Review Sheet to aid committee members in their evaluation of the grant proposals.
- **2.6** Staff shall coordinate with grant applicants to provide information about the application process and upcoming meeting agendas.
- **2.7** Staff shall notify all applicants of their award status.
- **2.8** Staff shall work with grant recipients to execute grant agreements, process reimbursement requests, and complete required reporting for the grant.

Page **1** of **5** Date: 7/10/2023

# 3. PROCEDURE

**3.1** Staff shall prepare the following technical review for every eligible application received based on the application material presented as well as research staff performs.

APPLIC	ANT NAME, PROJECT/F	ROGRAM TITLE	WC1-0XX-2024
A.	Grant Amount Requested	\$XXX	
B.	Match Amount	\$ and %	
C.	Total Project Cost	S	
D.	Category	Category type	
E.	Summary	Brief summary of proposal.	
F.	Location	Description of location	
G.	Water Source	☐ Colorado River ☐ Groundwater ☐ Other ☐ Description of source of water.	
н.	Volume of water conserved	(range in acre-feet)	
1.	Cost per acre foot conserved	(range)	

	CONSERVATION ACTIVITY BENEFITS AND RESULTS Statutory evaluation criteria #1, #2, and #4		
J.	Activity Type	Based on statutory project/program types	
ĸ.	Duration of project/program	Description of how long activities will take and how long benefits expected.  Project Completed:  Long term benefits Timeframe:	
L.	Community information	Description of the socioeconomic factors to consider	
M.	Costs and benefits of project/program	Costs: Benefits: Description of the costs and benefits, including environmental. Highlight dollar per acre foot and justification for calculation. Highlight other important factors (socioeconomic, category and activity type, geography, water source, etc.)	

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5			
N.	Eligibility for LTWAF or WSDF	Description of if project/program eligible from LTWAF/WSDF	
0.	Leverage of multiple funds	Description of plans to leverage funds	
P.	Source of match funding	Source of required 25% match	

	CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8		
Q.	Qualifications and capacity of applicant	Description of applicant's qualifications	
R.			
S.	Public comments	Description of any public comments	

Page **2** of **5** Date: 7/10/2023



**3.2** Following the committee action during a public meeting, WIFA staff will update the evaluation form to reflect the committee's evaluation using one of the following:

#### **Recommend Approval:**

WCGF Committee has evaluated this grant proposal and finds the statutory evaluation criteria have been met based on the information provided in this evaluation form. The Committee therefore recommends approval of this application.

#### Recommend Approval w/ modification to evaluation form:

WCGF Committee has evaluated this grant proposal and finds the statutory evaluation criteria have been met and therefore recommend approval of this application. The committee recommends modification of the grant evaluation form to include the following:

XXX

#### Recommend Approval w/ modification to grant amount:

WCGF Committee has evaluated this grant proposal and finds the statutory evaluation criteria have been met and therefore recommend approval of this application. The committee recommends modification of the grant amount requested to be the following:

XXX

#### **Recommend Rejection:**

WCGF Committee has evaluated this grant proposal and DOES NOT find the statutory evaluation criteria have been met. The committee therefore does not recommend approval of this application. The committee noted the following deficiencies:

- XXX
- **3.2.1** WIFA staff will document on the evaluation form committee member comments made during the voting process. If a committee member elects to explain their vote during the voting process, then those comments will be transcribed into the evaluation form and provided to the WIFA Board for consideration.
- **3.3** WIFA Staff will prepare a grant resolution for the WIFA Board to approve based on the Committee's recommendation.

#### 4. DEFINITIONS AND ABBREVIATIONS

WCGF: Water Conservation Grant Fund

WIFA: Water Infrastructure Finance Authority

Page **3** of **5** Date: 7/10/2023



#### 5. REFERENCES

- **5.1** A.R.S. § 49-1331 § 49-1335 and A.R.S. § 41-2702
- **5.2** Policy II.17: Water Conservation Grant Fund Policy

# 6. ATTACHMENTS

• WCGF Committee Review Sheet

Page **4** of **5** Date: 7/10/2023



#### Attachment

#### WIFA Grant Committee Review Sheet

Question: Is it eligible?

Monies in the WCGF may be used for any eligible purpose as described in A.R.S. § 49-1332, including the following:

- 1. Education and research programs on how to reduce water consumption, increase water efficiency or increase water reuse.
- 2. Programs or projects for rainwater harvesting, gray water systems, efficiency upgrades, installing drought-resistant landscaping, turf removal and other practices to reduce water use.
- 3. Programs or projects to promote groundwater recharge and improved aquifer health.
- 4. Programs or projects to improve groundwater conservation and surface water flows.
- 5. Landscape watershed protection, restoration and rehabilitation, including through green infrastructure and low-impact development to conserve or augment water supplies.
- 6. Projects facilitating coordinated water management, including groundwater storage and recovery.
- 7. Programs or projects to reduce structural water overuse issues.
- 8. Program implementation and administration costs for eligible programs.

Question: Does it provide significant benefits to further the objectives of the grant funding opportunity?

The purpose of the grant program is to facilitate voluntary water conservation programs or projects that are expected to result in long-term reductions in water use, improvements in water use efficiency, and/or improvements in water reliability. The following projects benefits may be useful in consideration of applications.

- **Cost** Substantially cost effective relative to amount of water conserved when evaluated against similar projects
- CO River Contributes to mitigating Colorado River Shortages over the long-term
- Groundwater Relieves pressure on groundwater supplies
- Impact Magnitude of the savings is significant relative to water use within project area
- New Advances novel solutions to conservation
- Reliability Resolves significant reliability challenges
- Obligations Facilitates compliance with negotiated agreements or regulatory requirements
- Multi-party Provides significant direct benefits to the environment and/or parties other than the applicant

Page **5** of **5**Date: 7/10/2023

# Agenda 5

# **AGENDA ITEM:**

Turf Removal Projects

# **ACTION REQUIRED:**

None

# **PREVIOUS ACTION:**

✓ None

# **STAFF CONTACT:**

None

# **ATTACHMENTS:**

Fact Sheet

# **STAFF COMMENTS:**

None



# **Turf Removal**

# of Applications Received	24	\$ of Applications Received	\$38,127,022
# of Applications Awarded	2	\$ of Applications Awarded	\$2,232,500
# of Applications for	c	\$ of Applications for	\$12,578,994
consideration today	ס	consideration today	\$12,578,994

#### Outdoor Water Use:

- Average family uses 320 gallons of water per day<sup>1</sup>
- **30-60%** of water use is for outdoor uses<sup>1</sup>
- Up to 50% of water for irrigation lost due to evaporation, wind, or runoff<sup>1</sup>
- 24.6 gallons of water is estimated to be saved per square foot of turf removed per year<sup>2</sup>
  - Based on that estimate 13,246 square feet of turf removed results in 1 acre-foot of water saved per year

#### Rebate Programs:

- "Multiplier Effect" For every 100 homes that convert their yards using a rebate, an additional 132 nearby homes will convert their grass without the rebate incentive<sup>3</sup>
- Less than 4% of participants who receive turf rebates later revert to grass<sup>4</sup>
- Rebates for turf removal vary from \$0.25 to \$1.00 per square foot of turf removed<sup>5</sup>
- Rebate caps typically set at \$750 to \$5,000 per customer<sup>5</sup>

#### Cost Estimates:

- Urban landscape conversion programs estimated costs are \$1,600-\$6,500/acre-foot<sup>5</sup>
- Rebate that pays \$0.50 per square-foot of turf removed, that yields an annual water savings of 50 gallons per square-foot, then costs around \$3,260 per acre-foot of water savings<sup>5</sup>
- Water benefits accrue over time, if turf removed from one acre of land, the total savings over 5 years is 33.4 acre feet, reducing the initial cost of \$3,260 per acre-foot to \$651 per acre-foot by year five (with continued savings after that)<sup>5</sup>

<sup>&</sup>lt;sup>1</sup>WaterSense, (2017). "Outdoor Water Use in the United States." <a href="https://19january2017snapshot.epa.gov/www3/watersense/">https://19january2017snapshot.epa.gov/www3/watersense/</a> <a href="pubs/outdoor.html">pubs/outdoor.html</a>
<a href="https://19january2017snapshot.epa.gov/www3/watersense/">https://19january2017snapshot.epa.gov/www3/watersense/</a> <a href="pubs/outdoor.html">pubs/outdoor.html</a>
<a href="pubs/outdoor.html">Pubs/

<sup>&</sup>lt;sup>3</sup> Marx, A. (2021). "Quantifying the Multiplier Effect of Southern California's Turf Removal Rebate Program with Time-Series Aerial Imagery." Journal of the American Water Resources Association 344–355. https://doi.org/10.1111/1752-1688.12901.

<sup>&</sup>lt;sup>4</sup> Marx, A. (2021). "Estimating the Reversion Rate for the Turf Removal Rebate Program: 2020 Update." <a href="https://www.bewaterwise.com/pdfs/Study2-ReversionRate.pdf">https://www.bewaterwise.com/pdfs/Study2-ReversionRate.pdf</a>

<sup>&</sup>lt;sup>5</sup> Water for Arizona Coalition (2023). "Investing in Arizona's Water Future." <a href="https://www.waterforarizona.com/wp-content/uploads/2023/05/Investing-in-Arizonas-Water-final.pdf">https://www.waterforarizona.com/wp-content/uploads/2023/05/Investing-in-Arizonas-Water-final.pdf</a>

# Agenda Item 5A

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-037-2023 - City of Phoenix - WCGF - \$3,000,000

#### **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### **PREVIOUS ACTION:**

✓ Water Conservation Grant Committee tabled this application on June 8, 2023

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-037-2023 City of Phoenix (see supplemental book)

#### **STAFF COMMENTS:**

None



CITY OF PHOENIX, Commercial and Residential Turf Conversion Rebates		WC1-037-2023
Grant Amount Requested	\$3,000,000.00	
Match Amount	\$2,500,000.00 (Minimum 25% = \$750,000)	
Total Project Cost	\$5,500,000.00	
Category	Turf Removal	
Summary	The City of Phoenix proposes implementing a Turf Conversion Rebate program serving both commercial businesses and residential households to remove turf grass in their landscape and replace it with xeriscape. The initial rebate amount given will be \$2/square foot. This program will have long-term savings in water demand, as the average water savings for converting turf area to a landscape of low water use plants increases each year following conversion, saving on average, 50 gallons per square foot per year, leading to measurable water conservation with the potential to save an estimated 75 million gallons of water per year. The program will run until funds are depleted or the grant period expires, whichever comes first.	
Location	Phoenix, Arizona in Maricopa County	
Water Source	<ul><li>⊠ Colorado River (CAP)</li><li>⊠ Groundwater</li><li>⊠ Other (Salt &amp; Verde Rivers including SRP)</li></ul>	
Volume of water conserved	WIFA Staff Estimated: 1,960 - 58,600 acre feet over li	fespan (25 years)
Cost per acre foot conserved	\$51- \$1500 per acre foot	

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4	
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)
	Project Completion: August 2025 Lifespan Expected Benefits: 25 years

Community information	Population: 1.6 million 41 % White, 7.3% Black or African American, 2.1% Native American, and 42% Hispanic or Latino. The median household income is \$64,927 with a 15% rate of persons in poverty. Phoenix serves an average of 2 people per household.
Costs and benefits of project/program	Benefits: The clear benefit of the turf conversion rebate program is the acre-feet of water saved, resulting in long term reductions in water use. Applicant estimates this amount to be 230 acre-feet over the course of the program or 1,151 acre-feet of lifetime reductions. The program also will reduce the use of fertilizer used in landscapes, greatly benefitting the environment. The costs amount to the staff time to process the applications and issue the rebates and the actual dollar amount of the rebates themselves.  Direct water savings to downstream users.  Applicant Calculated Water Savings: 115 acre feet annually The City of Phoenix bases its calculations on an estimated 1.5 million square feet converted over a 10-year lifetime with a conservative estimate of 50 gallons per square foot per year conserved that aligns with more municipalities in the region.

	FUNDING SOURCES Statutory Evaluation Criteria #3 and #5
Eligibility for WIFA's Long-Term Water Augmentation Fund or Water Supply Development Fund.	
Leverage of multiple funds	It is the intent of the City of Phoenix to apply for Bureau of Reclamation funds to maximize the dollar amount that can contribute to the program and increase the water savings. No other funding source will be sought by the city.
Source of match funding	Cash Match: \$2,500,000  The Phoenix Water Services Department will be the source of any matching funds, exceeding the match requirement of 25% in the amount of approximately 2.5 million dollars.



CAPACITY, FEASIBILITY, & PUBLIC COMMENT  Statutory Evaluation Criteria #6, #7, and #8		
Qualifications and capacity of applicant	The Conservation Team at the City of Phoenix is comprised of 5 Water Resource Specialists and a Water Conservation Project Manager.  Amy Garcia, Water Resource Specialist, will be managing the rebate program.  Water Resource Specialists: Elijah Tangenberg assisting in commercial rebates, Aaron Boydston will be providing quantification of water savings, Ginny Svec and Emilie Brown will be providing outreach and promotion of the program and Water Conservation Project Manager Christian Delgado will be assisting in HOA rebates.  All water conservation staff have at least a bachelor's degree and 3 of the 6 have master's degrees with a fourth working on hers. The city also anticipates hiring two additional staff to assist with processing the rebates.	
Feasibility of project/program	With ample staff and resources available to the program, the city anticipates relative ease in operating the program. Much will depend on demand, but the city is prepared to meet that demand.	
Public comments	As indicated by residents who have expressed interest, the program is anticipated to have high interest and support by the community of residents and businesses.	

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.



The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

#### **Attachments:**

- Full Application
- Budget

#### **Evaluation Criteria Statutory Reference:**

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

Recommend Approval of Grant Application with Modifications

# Agenda Item 5B

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-008-2023 - City of Chandler - WCGF - \$975,000

# **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

# PREVIOUS ACTION:

None

#### **STAFF CONTACT:**

Lindsey Jones

# **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-008-2023 City of Chandler (see supplemental book)

#### **STAFF COMMENTS:**

None



CITY OF CHANDLER, Grass Removal Rebate Program (Multi-family, HOA and Commercial Property)  WC1-008-202		
Grant Amount Requested	\$975,000.00	
Match Amount	\$243,750.00 (Minimum 25% = \$243,750.00)	
Total Project Cost	\$1,218,750.00	
Category	Turf Removal	
Summary	The conservation activity proposed is removal of functional and non- functional grass from non-residential properties, including (but not limited to), multi-family, HOA's, commercial, industrial, and institutional sites. These grass areas will be replaced with low water use landscapes that utilize drip irrigation techniques to ensure long-term durable water savings through an overall reduction in water demand and increased irrigation efficiency.  Project work activities:  1) Remove functional and non-functional grass from non-residential properties 2) Replace grass areas with low water use landscapes that utilize drip irrigation techniques	
Location	Chandler, Arizona in Maricopa County	
Water Source	<ul> <li>☑ Colorado River (CAP)</li> <li>☑ Groundwater</li> <li>☑ Other - reclaimed, (Salt &amp; Verde River including Strength of the conserved will include Colorado River water, Salt &amp; Vergroundwater and reclaimed water</li> </ul>	and the water
Volume of water conserved	WIFA Staff Estimated: 2,300-19,000 acre feet over life	espan (25 years)
Cost per acre foot conserved	\$51-\$424 per acre-foot	



CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4		
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)	
Duration of project/program	Project Completed: November 2026 Long term benefits Timeframe: 25 years	
Community information	Population: 286,030  Housing Units - 112,332 as of July 1, 2023 Average Household Income - \$126,000 in 2022 Incorporated Area - 64.90 square miles Diverse Community White: 58.4% Hispanic or Latino: 22.6% Asian: 12.0% Black or African American: 6.0%	
Costs and benefits of project/program	I III dalion systems. Additionally, the low water use plant and tree	

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF  The proposed conservation activity is not eligible for funding from WIFA's Long-Term Water Augmentation Fund or Water Supply Development Fund.	
Leverage of multiple funds	Applicant states they are actively researching other grants such as the Bureau of Reclamation Water Smart Grants that are available to support non-functional grass removal.



Source of match funding	Cash Match: \$243,750 - Funds from participating conversion sites for the conversion work  Additional In-Kind \$104,000 - Chandler staff time to coordinate, measure, and consult pre-conversion, permitting costs, plans review and approval process, staff field work and construction management, final inspections, processing, and grant administration.
CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8	
Qualifications and capacity of applicant	Chandler Water Conservation staff has administered multiple rebate and incentive programs since the early 1990s, issuing well over 10,000 rebates. Chandler is well suited to manage this activity, however, due to the increased workload additional staff will be needed to administer this conservation activity.
Feasibility of project/program	There is wide support for this program within the City of Chandler. Applicant has already developed a proposal for the staffing requirements to administer the program and determined the program is feasible. They will be hiring temporary staff to help administer this projects success.
Public comments	Based on an initial survey conducted in April/May 2023, there is community support for this conservation activity.

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

#### **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.



WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

# **Attachments:**

- Full Application
- Budget
- Media Release
- Letter to Bureau of Reclamation

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

# Agenda Item 5C

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-016-2023 - Town of Gilbert - WCGF - \$3,000,000

# **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### **PREVIOUS ACTION:**

✓ Water Conservation Grant Committee tabled this application on June 8, 2023

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-016-2023 Town of Gilbert (see supplemental book)

#### **STAFF COMMENTS:**



TOWN OF GILBERT,	Municipal Grass Removal Program	WC1-016-2023
Grant Amount Requested	\$3,000,000.00	
Match Amount	\$750,000.00 (Minimum 25% = \$750,000.00)	
Total Project Cost	\$3,750,000.00	
Category	Turf Removal	
Summary	The Town of Gilbert wants to set the example of removing mostly non-functional grass throughout the Town and replace it with xeriscape and drought-tolerant plants, along with replacing some functional areas with artificial turf, such as with Cosmo and Crossroads Park.  Currently, the Town has begun this process by identifying 567,000 sq ft of grass to be removed at 8 different locations.	
Location	Gilbert, Arizona in Maricopa County	
Water Source	<ul> <li>☑ Colorado River (CAP)</li> <li>☐ Groundwater</li> <li>☑ Other (Salt and Verde River and reclaimed water)</li> </ul> The source of water that will be conserved varies between the different parks and facilities and the location within Gilbert, but will consist of Salt and Verde River water, Colorado River water delivered through the Central Arizona Project, and reclaimed water.	
Volume of water conserved	WIFA Staff Estimated: 1,000- 1,50 acre feet over lifes	pan (25 years)
Cost per acre foot conserved	\$2,000-\$3,000 per acre foot	

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4		
Activity Ty	pe Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)	
	of Project Completed: Approx Dec 2025 Long term benefits Timeframe: 25 years for turf removal	

	Population: 280,000
	The Town's demographics consists of a median age of 34.3 and 67% of the population is under the age of 45.
Community	In addition, "approximately 70% of Gilbert's psychographic make-up contains Up and Coming Families, Boom burbs, and Workday Drive.
information	These groups are characterized as younger families with median ages in the low to mid 30s focused on planting roots in suburban areas near larger cities. They are also well-educated with 70% receiving some college education, and over 50% obtaining a college degree" (http://www.gilbertedi.com/demographics/). Gilbert's principal economic activities focus in "the Science, Technology, Engineering and Math industries.
Costs and benefits of project/program	Costs: \$3,750.00 total cost including internal staff hours, hired contractors, engineering, marketing, construction.
	Benefits: The benefits from removing grass include cost savings from less water used, as well as less energy used from the irrigation systems running less frequently. This will also increase water security and resilience to climate change, along with reducing the need for the Town to rely on backup supplies in times of shortages. In addition, replacing grass with native landscaping will be a positive environmental impact to aid in supporting local wildlife, pollinators and the environment, while reflecting the natural landscapes around them.
	Furthermore, the decrease in routine maintenance, such as with the required mowing, weed whacking, etc., will play a role in reducing urban air pollution, along with less pesticides and fertilizers being used that could improve stormwater quality from potential runoff.
	Applicant Reported Water Savings: 50 acre feet annually Current planned grass to be removed = 567,000 sq ft; annual water use of over seeded grass = 19,783,000; Desert adapted plants at 40% density annual water use = 3,612,000; Difference is annual water savings = 16,171,000/326000 = 49.6 acre feet per year.



FUNDING SOURCES Statutory Evaluation Criteria #3 and #5		
Eligibility for LTWAF or WSDF	The Municipal Grass Removal Program will not focus on water supply development projects and does not align with WIFA's Long-Term Water Augmentation Fund or the Water Supply Development Fund. The focal point of the conservation activity will be removing grass at parks and facilities managed by the Town of Gilbert to help in reducing outdoor irrigation use and in creating long-term water savings.	
Leverage of multiple funds	The water conservation activity will maximize funding from internal sources which is \$750,000 planned for the 25% match of this grant. No other federal funding or other sources are included at this time.	
Source of match funding	Cash Match: \$750,000.00	

CAPACITY, FEASIBILITY, & PUBLIC COMMENT  Statutory Evaluation Criteria #6, #7, and #8		
Qualifications and capacity of applicant	The Town of Gilbert has the necessary qualifications and capacity for completing the proposed water conservation activity with evidence of this seen through the past success of removing grass at the Town's parks and facilities. Starting in 2013 through 2020, the Town has removed 126,600 sq ft of grass at 6 different areas through contracting out the work for engineering and construction, which is typical for the Parks and Facilities Department and is within its normal operations. The only past managerial deficiency noted from these activities was the delay in removing more grass due to the lack of funding to continue the program at the scale and timeline desired.  The individuals who will be collaborating and managing this activity are Town of Gilbert staff, which includes Kylie Sorensen, Parks & Recreation Manager, Zachary Poweziak, Park Operation Superintendent, Scott Hesser, Parks Field Supervisor, and Richard Bay, Parks Field Supervisor.	
Feasibility of project/program	Applicant states that the feasibility of completing this water conservation activity is very high. Past success from removing grass within the Town of Gilbert's parks and facilities has provided the experience needed to accomplish the goal of this program.	



#### **Public comments**

The Town of Gilbert has committed to becoming more water wise with municipal facilities and actively encourages its residents to follow suit. The community of Gilbert has adopted this water wise mindset to ensure water conservation is more attainable and effective. Examples of this support is seen from the collaboration and close working relationships between internal departments such as with Parks and Facilities who have committed to conserving water.

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

#### **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

# Agenda Item 5D

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-018-2023 - City of Glendale - WCGF - \$3,000,000

# **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### **PREVIOUS ACTION:**

✓ Water Conservation Grant Committee tabled this application on June 8, 2023

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-018-2023 City of Glendale (see supplemental book)

#### **STAFF COMMENTS:**



GLENDALE, ARIZON Xeriscape Landscape	A, Transportation Department Right Of Way Program	WC1-018-2023
Grant Amount Requested	\$3,000,000.00	
Match Amount	\$3,259,290.00 (Minimum 25% = \$750,000.00)	
Total Project Cost	\$6,259,290.00	
Category	Turf Removal	
Summary	The City of Glendale, Right of Way Xeriscape Landscape Program is a general water conservation program. The water efficiency usage will be through two components that make-up the program: 1) conversion of right of ways to xeriscape landscape, and 2) smart irrigation technology. These components will perpetually reduce the city's water consumption and, if awarded, this grant will help maintain long-term sustainable xeriscape landscape infrastructure that will help meet Glendale's water conservation goals and improve aesthetic appeal for residents.	
Location	Glendale, Arizona in Maricopa County	
Water Source	<ul><li>⊠ Colorado River (CAP)</li><li>□ Groundwater</li><li>⊠ Other (Salt River Project)</li></ul>	
Volume of water conserved	WIFA Staff Estimated: 670-1000 per acre foot over life	espan (25 years)
Cost per acre foot conserved	\$2,900- \$4,500 per acre foot	

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4		
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)	
Duration of project/program	Project Completed: December 31, 2026 Long term benefits: 25 years for turf removal	
Community information	Population: 249,630  The city is comprised of a diverse community impacted by the conserved water such as 40.2 percent Hispanic or Latino of any race; 7.9 percent Black or African American; and 5.6 percent Asian (U.S. Census). On average, residents in Glendale use 9,000 gallons of water	



	and generate 6,800 gallons of wastewater per month (2021 Water Quality Report). Current Right-Of-Way maintenance and landscape activities account for about 445.2 acre-feet of water with a potential of up to 556.5 acre-feet under standard conditions.
Costs and benefits of project/program	Costs: \$6,259,290.00 over the life span of the program  Benefits: Water and energy conservation, pollution reduction through the elimination of irrigation runoff, dust control, and reduced maintenance costs. Additionally, xeriscape benefits the local wildlife by providing habitat (especially for pollinating insects), whereas turfgrass provides minimal habitat to species.
	Applicant Reported Water Savings: 56 acre feet annually Xeriscaping = 37AF; Water Harvesting Features = 6AF; Smart Irrigation Systems = 3AF; Install More Decorative Rock =AF; Natural Turf Removal = 10AF; EX. Natural Grass water usage – Per 1000 SF = 35,000 Gal/Yr Xeriscape water usage – Per 1000 SF = 15,000 Gal/Yr. Sample calc. in water savings for natural grass conversion: 158.4 x 20,000 = 3,168,000 Gal/Yr = 9.72 AF

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5		
Eligibility for LTWAF or WSDF	No, there are no known impacts of this potential WCGF funding to other known and potential funding sources for this program.	
Leverage of multiple funds	The City is using state gas tax funds, City General funds, and state legislature funds. Other funding sources like federal funds will also be pursued.	
Source of match funding	Cash and In-Kind - \$3,259,290.00 Applicant also mentions In-Kind match but they do not indicate an amount	

CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8	
Qualifications and capacity of	The City has a long list of water conservation funding and grants they have received over the last 10 years.
applicant	*Purab Adabala, City of Glendale, Deputy Director, Transportation *Javier Gurrola PE, City of Glendale, Principal Engineer, Transportation

	*Fred Sanchez, City of Glendale, Right of Way Supervisor,	
	Transportation	
	<u>.</u>	
	*Joanne Toms, City of Glendale, Environmental Program Administrator,	
	Water Services	
	*Anne Stahley, City of Glendale, Water Conservation Specialist, Water	
	Services	
	Applicant reports that the program is very feasible.	
Feasibility of	The City of Glendale Transportation Right-Of-Way Division has	
_		
project/program	dedicated staff and enough resources to manage and uphold the	
	contractor obligations, such as contract management, compliance, and	
	inspections.	
<b>-</b>		
Public comments	Yes, Council is supportive of this program. Also, at various public	
	meetings, staff has received supporting comments from residents. The	
	Citizens Transportation Oversight Commission has also stated its	
	support of this program. See letter of support in "Additional Supporting	
	Documents".	
L		

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget
- Letter of Support

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

# Agenda Item 5E

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-029-2023 - City of Peoria - WCGF - \$2,523,750

# **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

# **PREVIOUS ACTION:**

None

# **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-029-2023 City of Peoria (see supplemental book)

# **STAFF COMMENTS:**



CITY OF PEORIA, Par Turf Reduction	rks and Recreation Water Conservation Program,	WC1-029-2023
Grant Amount Requested	\$2,523,750.00	
Match Amount	\$841,250.00 (Minimum 25% = \$630,937.50)	
Total Project Cost	\$3,365,000.00	
Category	Turf Removal	
Summary	Targeted turf reductions throughout the Parks and Recreation footprint.  Proposed locations would include: Alta Vista Park, Apache Park, Calbrisa Park, Camino A Lago Park, Deer Village Park, Desert Amethyst Park, Fletcher Heights Park, Fletcher Heights Park North, Palo Verde Park, Paradise Lane Turf Area, Parkridge Park, Sonoran Mountain Ranch Park, Sunrise Park, Sunset Park, Terramar Park, Westland Park, and WestWing Park.	
Location	Peoria, Arizona in Maricopa County	
Water Source	<ul><li>⊠ Colorado River (CAP)</li><li>□ Groundwater</li><li>□ Other</li></ul>	
Volume of water conserved	WIFA Staff Estimated: 1,460-2,200 acre feet over life	span (25 years)
Cost per acre foot conserved	\$1,150- \$1,730 per acre foot	

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4		
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)	
	Project Completed: December 2026 Long term benefits Timeframe: 25 years	
Community information	Population: 200,000	

	Peoria covers nearly 179 square miles and is home to over 200,000 residents making it Arizona's ninth largest city in terms of population. Peoria is a rapidly growing, modern city that offers a high quality of living in the natural beauty of the Sonoran Desert.  66% White 20.6% Hispanic 5.3% Asian
Costs and benefits of project/program	Costs: Total Cost of program is \$3,365,000.00  The estimated water savings is 78 acre-feet per year.  \$130,680 approximately for every acre of turf removed. That includes the planting of xeriscape, all materials, and staff time.  Benefits: Significant reduction in water consumption. Additionally, the planting of trees results in the reduction of air pollution, storm water runoff, heat island effect reduction, and other benefits.  Applicant Reported Water Savings: 78 acre feet annually The department intends to remove 25.74 acres of turf, resulting in 25,394,826 gallons, or 77.93 acre-feet of water savings per year.

	FUNDING SOURCES Statutory Evaluation Criteria #3 and #5
Eligibility for LTWAF or WSDF  None of the proposed projects would qualify for funding under the Lo	
Leverage of multiple funds	The existing Capital Improvement Project (Water Conservation Program) is a mechanism that the Parks and Recreation Department uses to manage its drought mitigation efforts, to include turf reductions, the 2018 and 2023 Turf and Irrigation Studies, as well as several irrigation system repairs and improvements.
Source of match funding	The entirety of the matching amount will be funded by the city's current Water Conservation Capital Improvement Program.



# CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8

The Parks and Recreation Department has a host of supervisory staff with a wealth of agronomic and project management experience.

Nathan Branham – Irrigation Coordinator

Nathan is the Irrigation Coordinator for the City of Peoria and has extensive experience with multiple irrigation systems, to include reclaimed and potable water.

Michael Elliott – Park Operations Manager

Michael currently serves as the Park Operations Manager for the city and has extensive experience with project management and grant execution.

Zachary Matz – Parks Superintendent

Zach has over 15 years of professional parks and recreation experience, to include programming budgets, preventative maintenance operations and managing capital improvement projects. Zach also has experience writing and implementing federal, state, local, and private grants.

# Qualifications and capacity of applicant

Erik Ostlund – Parks Superintendent

Erik has over 30 years of agronomic, irrigation, turfgrass, and construction experience. He has a degree in Turfgrass Management and has overseen numerous irrigation, park, and golf course renovations.

Brandon Putman – Parks Superintendent

Brandon has extensive experience managing and constructing athletics fields, to include the city's 80-acre community parks and Major League Baseball fields. Brandon also has a wealth of experience managing landscape and construction projects that are federally funded.

Todd Wuellner – Field Operations Manager

Todd has an extensive background in turfgrass management and park construction. Todd has overseen agronomic practices across several municipalities and coordinated feedback and collaboration in the design and construction of several multi-million-dollar regional park developments.



Feasibility of project/program	Applicant reports that this project is extremely feasible. The Water Conservation Program is an ongoing program aimed at implementing water conservation strategies throughout the Department. Turf reductions are essential elements of any park refresh project and the proposed funding for this conservation activity would accelerate that program.
Public comments	Staff and money are in place now to fund this project.  The Parks and Recreation Department deliberately involves its constituency with regard to capital improvements. In addition to the actions outlined in the citizen-engaged Community Services Master Plan, parks staff frequently utilizes community engagement initiatives to
	garner citizen input for proposed projects. This conservation activity will be no exception.

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget
- Turf Study Combined
- Drought Management Plan
- Water Conservation CIP Summary
- Drought Report March 2023
- WCGF Park Matrix

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

# Agenda Item 5F

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-051-2023 - City of Tempe - WCGF - \$80,244.54

# **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

# **PREVIOUS ACTION:**

None

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-051-2023 City of Tempe (see supplemental book)

# **STAFF COMMENTS:**



CITY OF TEMPE, Non	ınctional Turf Remo	/al at City Parks	WC1-051-2023
Grant Amount Requested	\$80,244.54		
Match Amount	26,748.18 (Minimum	25% = \$20,061.13)	
Total Project Cost	\$106,992.72		
Category	Turf Removal		
Summary	Tempe proposes to remove 27,605 square feet of nonfunctional turf from three of its city parks, saving an estimated 772,940 gallons of water (2.37 acre-feet) annually. This nonfunctional turf is located in areas that are difficult to irrigate, such as against walls and on steep slopes.		
Location	Tempe, Arizona in Maricopa County		
Water Source	<ul><li>□ Colorado River</li><li>⋈ Groundwater</li><li>⋈ Other: Salt and</li></ul>	Verde River (SRP)	
Volume of water conserved	VIFA Staff Estimated	l: 38-56 acre feet over lifespan (2	25 years)
Cost per acre foot conserved	61,430- \$2,140 per ac	re foot	

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4		
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)	
Duration of project/program	Project Completion: December 2023 Lifespan Expected Benefits: 25 years	
Community information	Population 192,687 in 40 square miles  Tempe is a unique provider in that non-residential water uses account for about half of the water used in the service area. As such, it is very important for Tempe to model water conservation best practices for its residential, commercial, and industrial customers.	
Costs and benefits of project/program	Costs: \$106,992.72 The costs of the program include labor and supplies inclusive in the	



process of conversion, which includes:
-Removing the turf
-Converting and installing new irrigation systems
-Installing decomposed granite
-Installing shrubs, groundcover and plants
Benefits: The benefits of the conservation activity include the following: -Increased watering efficiency -Reduced water demand of the landscape
-Replacement of high-water-use, exotic turf with desert-friendly plants -Reduced damage of nearby infrastructure from reduction of runoff
-Promotion of desert-friendly plants
-Promoting Tempe's water efficiency as an example for the service area
Applicant Calculated Water Savings: 772,940 gallons (2.37 acre-feet) This project is estimated to remove 27,605.00 square feet. The calculator resulted in an estimated 28 gallons of water saved for each square foot of turf removed and replaced with a desert landscape at about 45.5% density and at 80% distribution uniformity.

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5		
Eligibility for LTWAF or WSDF	No, the proposed water conservation activity is not eligible for WIFA's Long-Term Water Augmentation Fund and Tempe is not eligible for the WSDF.	
Leverage of multiple funds	Tempe is seeking to combine at least four budget sources to make this conservation activity successful. The budgets sources include the following:  -Water Conservation Program rebate funds (Enterprise Fund) -Parks Division operation funds (General Fund) -Capital Improvement Funds -Federal Funds through WIFA	
Source of match funding	The in-kind contribution from Parks includes staff time and investments in project management and overseeing, approving, and implementing aspects of the project.	



CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8		
Qualifications and capacity of applicant	The City of Tempe Water Conservation has successfully supported the conversion of over 6.5 million square feet of turf into desert landscapes through its numerous rebate and grant programs, including the Residential Landscape Conversion, Non-Residential Landscape Conversion, and the Neighborhood Grants Program.  The turf conversion projects will be led by city staff, including two individuals as lead:  -Cara Kamienski, Tempe's Capital Improvement Coordinator -David McClure, Tempe Park's Landscape Architect	
Feasibility of project/program	The proposed water conservation program is feasible. The Parks Division has an existing CIP worth up to \$60 million towards renovations and installations at city parks. The proposed turf conversions will be incorporated into the existing renovations projects, many of which include related elements, such as landscape improvements and new plantings. The projects will therefore utilize the same or similar contractors already on-site to construct improvements and enhance existing funding to ensure that water conservation conversion upgrades occur.	
Public comments	Tempe residents have demonstrated strong support for non-functional turf removal. Tempe's residents, businesses and neighborhoods have voluntarily removed more than 6.5 million square feet of turf into desert landscapes through its numerous rebate and grant programs, including the Residential Landscape Conversion, Non-Residential Landscape Conversion, and the Neighborhood Grants Program.	

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.



The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

# Agenda 6

#### **AGENDA ITEM:**

Advanced Meter Projects

# **ACTION REQUIRED:**

None

# **PREVIOUS ACTION:**

✓ None

# **STAFF CONTACT:**

None

# **ATTACHMENTS:**

Fact Sheet

# **STAFF COMMENTS:**



# **Advanced Meters**

# of Applications Received	17	\$ of Applications Received	\$19,217,748
# of Applications Awarded	3	\$ of Applications Awarded	\$6,250,000
# of Applications for	C	\$ of Applications for	\$7,506,294
consideration today	ס	consideration today	<i>≯7,</i> 5∪0,294

#### **Estimated Water Savings:**

- 2 to 10% water savings for AMI programs<sup>1</sup>
  - Water savings from a reduction in unmetered deliveries, leak detection, and changes in customer behaviors
  - About 8% water savings if water consumption feedback informed by AMI data and facilitated by a digital platform<sup>1</sup>
  - 3.5-6.5% water savings per household who receive water use report<sup>2</sup>
  - Correlational studies suggest that AMI portals can promote water conservation, but it depends on individual and household characteristics and how communications are designed and targeted.<sup>1</sup>
- Approximately 3,300-6,000 gallons (0.0102 0.0190 acre-feet) savings per household<sup>2</sup>

#### **Cost Estimates:**

- \$250 \$590 per acre-foot saved (based on study of WaterSmart Software's Home Water Report which provides customers with water use data)<sup>2</sup>
- Average cost of smart meter: \$180<sup>3</sup>
- Average lifespan of smart meters: 15 years<sup>4</sup>



#### Glossary of Terms:

- Advanced Metering Infrastructure (AMI): A technology system that connects customer meters to the utility through a
  bi-directional communication network, such as telephone wires or radio frequency transmission, and stores and
  analyzes the collected data in a central database. Utilities can collect meter data at frequent intervals, relay that data
  to customers, and have additional capabilities (e.g. remote shutoff) depending on the system configuration.
- Automatic Meter Reading (AMR): A technology system by which a utility can digitally collect and store meter
  readings. Data can be communicated through hand-held dataloggers, radio frequency transmission, or telephone
  wires. Does not allow two-way communication between utility and meters.

<sup>3</sup>Jaffer, N. (2017). "High Cost of Smart Water Meters Slows Adoption by Utilities" <a href="https://thewaternetwork.com/article-FfV/high-cost-of-smart-water-meters-slows-adoption-by-utilities-LYrBMSsvcZtX-BB0Fi8OmA">https://thewaternetwork.com/article-FfV/high-cost-of-smart-water-meters-slows-adoption-by-utilities-LYrBMSsvcZtX-BB0Fi8OmA</a>

<sup>4</sup>Ontario Auditor General (2014). "Report on the Smart Metering Initiative" https://www.auditor.on.ca/en/content/annualreports/arreports/en14/311en14.pdf

<sup>&</sup>lt;sup>1</sup>American Water Works Association, (2022). "Increasing consumer benefits & engagement in AMI-based conservation programs" <a href="https://www.awwa.org/Portals/0/AWWA/ETS/Resources/Technical%20Reports/ami\_report\_feb\_2022.pdf">https://www.awwa.org/Portals/0/AWWA/ETS/Resources/Technical%20Reports/ami\_report\_feb\_2022.pdf</a>

<sup>&</sup>lt;sup>2</sup>Mitchel, D., & Cubed, M. (2013). "Evaluation of East Bay Municipal Utility District's Pilot of WaterSmart Home Water Reports" https://www.financingsustainablewater.org/sites/www.financingsustainablewater.org/files/resource\_pdfs/MCubed-Watersmart\_evaluation\_report\_FINAL\_12-12-13(00238356).pdf

# Agenda Item 6A

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-002-2023 – Apache Junction Water District-WCGF – \$1,065,845

# **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### **PREVIOUS ACTION:**

None

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-002-2023 Apache Junction Water District (see supplemental book)

#### **STAFF COMMENTS:**



APACHE JUNCTION PROJECT	WATER DISTRICT, ADVANCED METERING	WC1-002-2023
Grant Amount Requested	\$1,065,845.00	
Match Amount	\$ 851,100.00 (Minimum 25% = \$266,461.25)	
Total Project Cost	\$ 1,916,945.00	
Category	Advanced Meters	
Summary	* Install AMI devices at the remaining 4,300 water meters.  * Install a fixed network data collection system that will automatically collect and store hourly consumption data from all 4,500 meters.  * Deploy a web-based utility management portal and a web-based customer portal for customers to access their accounts to view both real-time flow and information and historical data.	
Location	Apache Junction, Pinal County	
Water Source	<ul><li>⊠ Colorado River (CAP)</li><li>⊠ Groundwater</li><li>□ Other</li></ul>	
Volume of water conserved (acre-feet)	WIFA Staff Estimated: 209-2,870 acre feet over lifespa infrastructure (15 years)	ın of
Cost per acre foot conserved	\$372-\$5,107 per acre-foot	

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4		
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)	
Duration of project/program	Project Completion: December 2023 Lifespan Expected Benefits: 15 years	
Community information		
Costs and benefits of project/program	Costs: equipment costs and staff time = total \$1,916,945.00  Benefits: Pumping less water saves electricity and assures less stress on the water supply. Staff will be reassigned to meter management and maintenance vs. meter reading.	



**Applicant Reported Water Savings:** 275 acre feet water conserved annually. Water meters on average save 2-10% water, they have calculated 6.6%

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF	Applicant does not believe this activity would be eligible for the LTWAF or WSDF. It is unclear whether this type of conservation program would be feasible with a repayment obligation under the WSDF or LTWAF.
Leverage of multiple funds	Applicant mentions they always try to leverage the funding sources for maximized results. They do not indicate a specific example.
Source of match funding	In Kind Staff time - \$ 851,100.00

# CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8

\*Mike Loggins has been in the water industry for over 20 years from an engineer, project manager, operation superintendent and finally to a director. Mike Loggins project managed the construction of a surface water plant that treats Colorado River water and was funded by a WIFA loan.

# Qualifications and capacity of applicant

\*Dennis Montes, Sam Fitzgerald, and Clay Blankenship, have installed over 4,000 meters that will tie to this AMI program equipment. District staff has also installed over 500 units to start the AMR system that will connect to the AMI program.

\*Charles Briggs, a project manager that has over 30 years in the water industry watching over the program.

\*Bill Stanford, superintendent that is over field staff has over 20 years' experience in the water industry working on meters and water distribution systems.

\*Rita Vineyard has over 5 years' experience as an administrative assistant and will manage the procurement and invoicing from the vendors.



Feasibility of project/program	Applicant states the program will take 6 months to one year to get started and then should see the benefit of water conservation for years to come.
Public comments	The community supports water conservation of all kinds from low water use plants to low water use fixtures. The AMI program will lead to public outreach to learn the program. The training will help customers access their accounts and understand their water usage catching water conservation opportunities.

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

# Agenda Item 6B

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-010-2023 - Town of Clarkdale— WCGF -  $\$562,\!500$ 

# **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

# **PREVIOUS ACTION:**

None

#### **STAFF CONTACT:**

Lindsey Jones

# **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-010-2023 Town of Clarkdale (see supplemental book)

#### **STAFF COMMENTS:**



TOWN OF CLARKDALE, Cellular Water Meter Upgrades WC1-010-2023		
Grant Amount Requested	\$562,500.00	
Match Amount	\$187,500.00 (Minimum 25% = \$40,625.00)	
Total Project Cost	\$750,000.00	
Category	Advanced Meters	
Summary	The Cellular Water Meter Upgrades Program allows purchase and installation of upgraded water meter technology for all customers on the Town of Clarkdale water system. The town has already replaced a quarter of the meters. Approximately three quarters of the connections still require meter upgrades to fully implement the program.  The Town's current meters are read once a month and require individual manual data retrieval by staff for hourly consumption data. The cellular meters update usage and alert information to the cloud every 15 minutes and the software integration allows customers as well as staff to view information and set leak alert criteria without a site visit. The grant will allow for purchase and installation of the additional meters.  Project work activities:  1) Upgrade water meters with Cellular Water Meters 2) Update usage and alert information to the cloud every 15 minutes 3) Detect leaks and alert customers of leaks	
Location	Clarkdale, Arizona in Yavapai County	
Water Source	<ul> <li>□ Colorado River</li> <li>☑ Groundwater</li> <li>□ Other</li> <li>The town pumps water from wells in the Verde River Value</li> </ul>	alley.
Volume of water conserved	WIFA Staff Estimated: 70-890 acre feet over lifespan (15 years)	of infrastructure
Cost per acre foot conserved	\$634-\$8,000 per acre foot	



CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4		
Activity Type	Programs or projects to improve groundwater conservation and surface water flows.	
Duration of project/program	Project Completion: estimated August 2024 Lifespan Expected Benefits: 15 years	
Community information	Population: 5,002 (2023)  The Town of Clarkdale was founded in 1912 as a company smelter town by William A. Clark, for his copper mine in nearby Jerome. The mine and smelter closed in 1953. The Town's water system has approximately 2,250 connections, including portions of the <b>Yavapai Apache Nation</b> , a Community College and the only railway service in the Verde Valley.  89.97% White 3.98% Native American 2.36 African American	
Costs: Initial costs of the program are related to meter replacement parts and labor. The Town will also incur a small monthly software fee for each cellular meter.  Benefits: Saving water due to identifying leaks early on; saving of wate as residents can better monitor their own use; conserving staff time to respond to lead calls that can be repurposed for a beneficial use.  Environmental impacts are the decreased water usage that is a positive impact to downstream users.  Applicant Reported Water Savings: 5 acre feet annually There are one or two major residential leaks per year that result in 0.5 acre-feet loss or more each. In December 2022 alone, software reported 140 leaks.		



FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF	The Cellular Meter Upgrade program does not increase water supplies and therefore does not qualify for either of these funding sources.
Leverage of multiple funds	Applicant does not state the leveraging of multiple funds
Source of match funding	Cash Match: \$187,500.00

CAPACITY, FEASIBILITY, & PUBLIC COMMENT  Statutory Evaluation Criteria #6, #7, and #8		
Qualifications and capacity of applicant	The Public Works Administration Manager, Virginia Smith, successfully implemented the updated meter reading software that allowed for the initial transition. To date, 84 meters have been successfully upgraded. Staff have demonstrated capacity to manage this program.	
Feasibility of project/program	This program has already begun and applicant has seen proven results. They feel it is a very feasible program moving forward. They have seen education and outreach to community members as the only hinderance at this time and as the meter replacement program begins, education will begin.	
Public comments	While the program has not yet been widely advertised, most community members that have had contact with are highly supportive. The community is conscious of water conservation as reflected by current GPCD of 62, well below national, state and nearby city GPCDs.	

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.



The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Meter Quote
- Budget

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

#### Agenda Item 6C

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-023-2023 – Maricopa Consolidated Domestic Water Improvement District – WCGF – \$128,466

#### **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### **PREVIOUS ACTION:**

None

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-023-2023 Maricopa Consolidated Domestic Water Improvement District (see supplemental book)

#### **STAFF COMMENTS:**



MARICOPA CONSOLIDATED DOMESTIC WATER IMPROVEMENT DISTRICT, Automated Meter Reading Installation Project  WC1-023-2023		
Grant Amount Requested	\$128,466.00	
Match Amount	\$42,822.00 (Minimum 25% = \$32,116.50)	
Total Project Cost	\$171,288.00	
Category	Advanced Meters	
Summary	The District is proposing to install automated reading meters. The AMR meters will replace out 156 conventional manual reading meters. The AMR meters will allow the District to notify customers of unusually high water use on the customer's property due to possible leaks, overuse or theft. The District will be able to provide customers with daily summaries of water usage to highlight ways in which the customers may be able to modify their behavior to reduce water consumption.  Project Work Activities:  1) Install automated reading meters 2) AMR meters will inform the District to notify customers of possible leaks 3) The District will provide customers with daily summaries of water usage to modify their behavior to reduce water consumption	
Location	Maricopa, Arizona in Pinal County	
Water Source	<ul><li>□ Colorado River</li><li>⊠ Groundwater</li><li>□ Other</li></ul>	
Volume of water conserved	WIFA Staff Estimated: 129-278 acre feet over lifespan (15 years)	of infrastructure
Cost per acre foot conserved	\$462- \$996 per acre foot	



CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4		
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)	
Duration of project/program	Project Completion: 18 months from start date Lifespan Expected Benefits: 15 years	
Community information	Population: Combined 530  The Water District has two small water systems, consisting of its New Saddleback Vista system and its Valle Escondido system. Both communities have been designated by Pinal County as Colonias with the residents being predominantly Hispanic and Latino. There are no defined economic activities associated with these two systems.	
Costs and benefits of project/program	Costs: \$171,288.00 – cost of meters and installation.  Benefits: better water management both by the District as well as by its customers, and real time water usage monitoring, together with reduced groundwater pumping, electrical demand and travel by water system operators.  Applicant Reported Water Savings: 16 acre feet annually Projected water savings is based on the results of the District's prior WIFA funded 2010 ARM project which indicated an average 15 percent per year reduction from the baseline year following AMR installation.	

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF	No, Long-Term Water Augmentation and Water Supply Development only add water supplies. Water conservation allows applicant to use existing water supplies in the most efficient way.
Leverage of multiple funds	The Water Conservation Grants Funding appears to be the only funding source available to the District at this time. Applicant is under a mandate from ADEQ to complete their nitrate issues and are using a USDA RD loan in order to do that.
Source of match funding	Cash Match: \$42,822.00

CAPACITY, FEASIBILITY, & PUBLIC COMMENT  Statutory Evaluation Criteria #6, #7, and #8	
Qualifications and capacity of applicant	William Collings, P.E., R.L.S., the Water District's on staff Engineer, has over 30 years of experience managing all aspects of similar USDA RD and WIFA funded projects.
Feasibility of project/program	The District has the managerial, administrative and technical capability to accomplish the project within the stated timelines.
Public comments	Based on stakeholder response at the District's May 8th Board Meeting there is community support for the proposed AMR project.

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

### **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

#### Agenda Item 6D

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-025-2023 – Metropolitan Domestic Water Improvement District – WCGF – \$3,000,000

#### **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### **PREVIOUS ACTION:**

None

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-025-2023 Metropolitan Domestic Water Improvement District (see supplemental book)

#### **STAFF COMMENTS:**



	MESTIC WATER IMPROVEMENT DISTRICT, Metro ring Infrastructure (AMI) Implementation and Provided Provide	WC1-025-2023
Grant Amount Requested	\$3,000,000.00	
Match Amount	\$2,258,319.00 (Minimum 25% = \$750,000.00)	
Total Project Cost	\$5,258,319.00	
Category	Advanced Meters	
Summary	This program proposal is for the implementation of Advanced Metering Infrastructure (AMI) in its main service area northwest of Tucson, Arizona and implementation of a WaterSmart Customer Platform for all its customers located in Pima County.  The work consists of installing AMI wireless communication equipment for meter data backhaul, upgrading components of commercial sized meters to be AMI capable, and replacing approximately 11,234 existing customer water meters with new meters and electronic endpoints capable of sending hourly water consumption to the WaterSmart Customer Platform so customers can receive timely information of their current and historic water usage for better management of this most precious resource.	
Location	Tucson, Arizona in Pima County	
Water Source	<ul> <li>☐ Colorado River (CAP)</li> <li>☐ Groundwater</li> <li>☐ Other</li> <li>The District is located within the Upper Santa Cruz Rive the Tucson Active Management Area. Their primary s groundwater.</li> </ul>	
Volume of water conserved	WIFA Staff Estimated: 1,820- 12,000 acre feet over the infrastructure (15 years)	ne lifespan of
Cost per acre foot conserved	\$372- \$5100 per acre foot	



СО	NSERVATION ACTIVITY BENEFITS AND RESULTS Statutory evaluation criteria #1, #2, and #4
Activity Type	Education and research programs on how to reduce water consumption, increase water efficiency or increase water reuse.
Duration of project/program	Long term benefits: 15 years
Community	Population Total: 58,000  The District operates five public water systems that will be beneficially impacted by this conservation activity. The meter replacement work and the network installation will occur in the Metro-Main service area, but all five systems will utilize the WaterSmart Customer Portal to reduce water usage.  The District's Metro – Main system has a population of 47,236 and is
information	residential and light commercial.  The Metro – Hub system has a population of 4,252 and is mostly residential with one School.  The Metro – Diablo system has a population of 5,542 and is currently all residential.  The Metro – E&T system has a population of 880 and is residential with one convenience store.  The Metro – Lazy system has a population of 77 and is all residential.
Costs and benefits of project/program	Costs: \$5,258,319  Benefits: educating the District's customer base through the use of an online customer portal that will allow them to see and monitor their water use so they can more efficiently use water now and into the future.  Additional benefits include reducing the amount of wasted water due to leaks as well as a reduction in the lost and unaccounted for water through improved meter accuracy. The expected amount of water saved per year is 1,119 acre feet.  Environmental impacts include a reduction of groundwater decline, less reliance on Colorado River water, and energy savings. Each month, the District calculates how much energy (electricity) it takes to produce one Million gallons of water. The current average energy usage for Metro Main is 2,916 kWh / Million Gallons. With the estimated reduction of water consumption at 1,119 acre-feet per year in water, this correlates to a reduction in energy use of 1,063,319kWh per year.



Applicant Reported Water Savings: 1,119
• 424.25 acre-feet due to customer conservation based on the ability to
monitor and know their hourly and daily usage. (based on 5% water
savings estimate)

• 569.48 acre-feet due to timely leak notifications (based on 80% of leaks fixed estimate)

23,196 customers x 8,000 gallons per year saved per customer = 185,568,000 gallons 185,568,000 gallons  $\div$  325,851 gallons per acre-foot = 569.48 acre-feet of water saved.

• 125.36 acre-feet of unaccounted water due to improved meter accuracy (based on 7.09% lost and unaccounted water)

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF	This conservation activity request is to allow for the more efficient use and conservation of water to save existing supplies. The Long-Term Water Augmentation Fund and the Water Supply Development Fund appear to be designed for bringing in additional supplies of water.  Applicant claims the requested conservation activity would not likely comply with the requirements of these funding sources.
Leverage of multiple funds	The District was recently selected for a grant award of \$2,000,000 for this conservation activity from the Bureau of Reclamation. The award process will be completed over the next couple of months which fits in perfectly with the timing of this Water Conservation Grant Fund application.
Source of match funding	Cash Match: \$2,258,319.00  The projected cost of this program is \$5,258,319. The District intends to utilize \$2,000,000 of Grant funding from the Bureau of Reclamation and the remaining balance, beyond this potential funding opportunity, will be from the District's operating budget to meet the 25% match requirement.



### CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8

Joseph Olsen is the District's General Manager and a registered Professional Engineer with over 22 years of leadership experience as well as managing multimillion dollar capital improvement projects and military deployments. Although Mr. Olsen, is not directly managing this conservation activity, he provides the leadership and support to staff and the program.

Steve Shepard, the District's Utility Superintendent will be the primary program manager overseeing this conservation activity. Steve Shepard has been employed at the District for over 30 years. During his 30 plus year tenure he has performed a wide variety of duties that includes meter reading, meter replacements, telemetry and SCADA programming, budgeting, supervision as well as project management, fixed network development and AMI deployment. As the superintendent, he manages a staff of 31 water utility professionals capable of providing assistance at every level of this implementation.

# Qualifications and capacity of applicant

Diane Bracken is the District's CFO with over 36 years of finance experience in both the public and private sector. She has managed the finance portions of grants and other federal funding for other governmental entities as well as WIFA loans received for the District. She has vast experience if performing Single Finance Audits that are typically required with Grant and Federal funding.

Travis Tarket is the Customer Service and Billing Supervisor with over 20 years of experience in both the public and private sectors creating, nurturing and retaining customer communications and confidence. In the last 10 years, he has been involved in multiple Water Meter Replacement Programs and conservation efforts. He will be leading the implantation of the WaterSmart Program. He will also manage the communication between the District and its customers while fostering customer involvement with the conservation program.

# Feasibility of project/program

Applicant believes the conservation activity is very feasible to complete. The work consists of replacing approximately 11,234 water meters and attaching the endpoint. This is a common work practice that District staff currently performs. In addition, the District has access to contractors for this program through a cooperative procurement contract that replacing water meters is their core business.



#### **Public comments**

Applicant reports a great deal of sector support for initiatives such as this one that reduce water consumption. The Tucson region has been recognized statewide and nationally as a leader in water conservation for many decades. Specifically, the District has offered rebates for conservation activities, to include replacement with efficient toilets and rainwater harvesting, for over 25 years. By implementing new technologies like AMI and customer access to real-time water use data, Metro Water District along with the Tucson region will continue to demonstrate its commitment to water conservation.

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

#### **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget
- Application Worksheet
- Certification Document
- 2<sup>nd</sup> copy of Budget

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

#### Agenda Item 6E

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC2-097-2023 - City of San Luis - WCGF - \$2,017,065.21

#### **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

### PREVIOUS ACTION:

None

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC2-097-2023 City of San Luis (see supplemental book)

#### **STAFF COMMENTS:**



CITY OF SAN LUIS, Advanced Metering Infrastructure (AMI) Implementation Program  WC2-097-2023		WC2-097-2023
Grant Amount Requested	\$2,017,065.21	
Match Amount	\$672,355.08 – (Minimum 25% = \$504,266.30)	
Total Project Cost	\$2,689,420.29	
Category	Advanced Meters	
Summary	Applicant states the program will replace current outdated meters and the current Automatic Meter Reading (AMR) system that is past or nearing its operational lifespan. The current reading system will be replaced with Advanced Metering Infrastructure (AMI), a robust form of water metering technology that allows direct transmission of water use data to the billing department.	
Location	San Luis, Arizona in Yuma County	
Water Source	<ul> <li>□ Colorado River</li> <li>☑ Groundwater</li> <li>□ Other</li> <li>Groundwater from the Yuma Basin and Sub-basin.</li> </ul>	
Volume of water conserved		
Cost per acre foot conserved	\$251- \$1,650 per acre foot	

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4	
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)
Duration of	Project Completion: Approximately 1 year from start date
project/program	Lifespan Expected Benefits: 15 years
	Population: 35,500 in an area of 26.5 square miles
Community	
information	The lowest point in Arizona is located on the Colorado River in San Luis, where it flows out of Arizona and into Sonora. The City of San Luis has

an area of 26.5 square miles and a population of 35,500. The population can be spread as follows: 35.6% under the age of 18, 12.8% from 18 to 24, 34.1% from 25 to 44, 13.4% from 45 to 64, and 4% who were 65 years of age or older. As of the census of 2020, the racial makeup of the city was 94.8% Hispanic followed by 3.3% White and 1.2% Black or African American. Out of any of the populated places in the contiguous United States, the City of San Luis is the sunniest, least humid, lowest frequency of precipitation, and has the highest number of days per year with the maximum temperature of 90 Fahrenheit degrees or higher. Summer temperatures reach well above 100 Fahrenheit degrees. Despite the previous mentioned climate, San Luis was named of the fastest growing cities in Arizona. One of the principal economic activities for San Luis is agriculture. The median income for a household in the city was \$43,630.00. However, about 24.3% of the population were below the poverty line.

Costs: The cost of the AMI system is \$2,689,420.29, which includes the meter cost, installation, commissioning, routine maintenance, and the cost to maintain the program such as internal training, planning, and data extraction.

Benefits: The most significant impact of this program will come in the form of water conservation benefits. Research from the American Water Works Association (AWWA) has shown AMI leads to an average daily water savings in the range of 6.3%-12.1% for engaged customers.

- 1. Water conversation will not only reduce the amount of water being used which conserves water for future use but also means less water is brought back through the effluent system which requires treatment before discharge.
- 2. Reduction in treatment cost is comprised through reduced use of electricity, fuel, and chemicals during the treatment process. Energy savings can be made through better understanding of water consumption patterns that allow timing and optimization for pump stations and water tank filling to lower energy price tiers.
- 3. The overall water infrastructure will benefit from reduced water usage which will extend the lifespan of these systems.
- 4. The environmental impact is through less pumping of groundwater which is retained in the aquifer. With the recent droughts and water shortages throughout the state, all water saving activities benefit preserving water supplies.

**Applicant Calculated Water Savings:** 509 acre foot annually AMI portal states average daily water usage decrease in the range of 6.3 to 12.1%. Applying this calculation to the city's 2022 water

# Costs and benefits of project/program



production of 4,204 acre-feet (AF), results t	to an estimated range of
potential water savings between 265 AF/yr.	. and 509 AF/yr.

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF	Applicant assesses that the conservation activity is not eligible for funding from the Long-Term Augmentation Fund or Water Supply Development Fund.
Leverage of multiple funds	This conservation activity will leverage committed Capital Improvement Projects (CIP) utility funds. The CIP is currently using water user's rates and fees for funding.
Source of match funding	Cash Match: \$672,355.08

	CAPACITY, FEASIBILITY, & PUBLIC COMMENT  Statutory Evaluation Criteria #6, #7, and #8	
Qualifications and capacity of applicant	, · · · · · · · · · · · · · · · · · · ·	
Feasibility of project/program	Successful completion of this activity within the required timeframe is highly feasible. It should take approx. 7 months to install. Also, vendor will provide the support and training needed to create a successful program.	
Public comments	The city reports great support from the community as they are interested in heightened conservation practices in both indoor and outdoor water use.	



The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

#### **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget
- Certification Form
- AMI Quote

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

#### Agenda Item 6F

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-049-2023 – Town of Snowflake – WCGF – \$732,418.50

#### **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### PREVIOUS ACTION:

None

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-049-2023 Town of Snowflake (see supplemental book)

#### **STAFF COMMENTS:**



TOWN OF SNOWFLAKE, System Wide Water Meter Replacement Program with New Meters and AMI Radio Read Modules.  WC1-049-202		WC1-049-2023
Grant Amount Requested	\$732,418.50	
Match Amount	\$244,139.46 (Minimum 25% = \$183,104.62)	
Total Project Cost	\$976,557.96	
Category	Advanced Meters	
Summary	Project will be Phase One of a system wide, turnkey residential meter replacement program utilizing radio read meters and associated billing program. This will include the replacement of approximately 500 meters and installation of radio read modules along with purchase of an interrogator, base station, mapping module, software, etc. The project will also include the installation of new radio read equipped water meters (approximately 10) on all town owned buildings, parks, and irrigation lines to track water use.	
Location	Town of Snowflake in Navajo County	
Water Source	<ul> <li>□ Colorado River</li> <li>⊠ Groundwater</li> <li>□ Other</li> <li>Watershed: Little Colorado River Basin</li> </ul>	
Volume of water conserved	WIFA Staff Estimated: 63- 660 acre feet over lifespan (15 years)	of infrastructure
Cost per acre foot conserved	\$1,100- \$11,570 per acre foot	

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4	
Activity Type	Programs or projects to improve groundwater conservation and surface water flows.
Duration of	Project Completion: December 2026
project/program	Lifespan Expected Benefits: 15 years



	Population: 6,104
Community information	The Town of Snowflake is a rural community that lies in a broad valley in east-central Arizona at an elevation of 5,686 feet with the Mogollon Rim to its west and the White Mountains to the south. The town is in Navajo County and although small in population, its incorporated area covers thirty (30) square miles, which is indicative of a huge potential for growth.
	Costs: \$976,557.96
	<b>Benefits:</b> Being able to accurately read and bill all town meters will increase revenue which the town intends to utilize for future capital improvements from their 5-year CIP.
	An increase in reading accuracy translates into customers knowing exactly how much water they are using and has been proven to increase water conservation and awareness.
Costs and benefits of project/program	The switch to radio reading technology will decrease the time it takes to read the meters each month as a single meter reader would drive the meter routes and the interrogator would receive the readings automatically. This would negate all the vehicle starts and stops the meter readers currently make to walk the numerous routes. It will also reduce the fuel usage and maintenance costs for their vehicles. A similar program in Taylor, AZ has shown a reduction in meter reading costs of up to sixty percent (60%).
	Applicant Calculated Water Savings: 18-acre feet annually Using a conservative estimate of a 5% reduction in water pumped upon completion of this conservation activity, the town would realize a 5,916,000 gallon per year reduction or 18.14-acre feet per year.

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5		
	Because this is a three-year program the use of the long-term funding mechanisms is impractical according to the applicant.	
Eligibility for LTWAF or WSDF	No, Long-Term Water Augmentation and Water Supply Development only add water supplies. Water conservation allows applicant to use existing water supplies in the most efficient way.	



Leverage of multiple funds	Applicant states they intend on taking advantage of additional funding sources, both local and federal, to continue their quest to protect groundwater supplies. Successful completion of this activity will provide both residents and future funding sources proof of the town's ability to manage and complete these types of activities.
Source of match funding	Cash Match of \$244,139.46

	CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8
	The town has utility staff that are well trained in this type of water system upgrade and they have been instrumental in identifying obsolete, under reporting and leaking water meters. The town manager is well versed with utility operation and has overseen numerous federally and townfunded programs.
Qualifications and capacity of applicant	Dan Lueder, has over 45 years of utility and public works experience.
Feasibility of project/program	The Applicant suggests the project is very feasible given their committed and experienced staff and cash match.
Public comments	Applicant reports that Snowflake residents understand the importance of protecting the area's finite potable water supply and have been supportive of conservation activities. The Snowflake Town Council supports this activity.



The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

#### **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

- Full Application
- Budget
- Meter Budget Info

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

### Agenda 7

#### **AGENDA ITEM:**

Agriculture System Upgrade

### **ACTION REQUIRED:**

None

#### **PREVIOUS ACTION:**

✓ None

#### **STAFF CONTACT:**

None

#### **ATTACHMENTS:**

Fact Sheet

#### **STAFF COMMENTS:**



### Agriculture Upgrades

# of Applications Received	15	\$ of Applications Received	\$19,878,841
# of Applications Awarded	2	\$ of Applications Awarded	\$3,554,390
# of Applications for	4	\$ of Applications for	\$6,500,000
consideration today		consideration today	,500,000

#### Agricultural Water Use:

- Irrigated agriculture = 74% of AZ's water use<sup>1</sup>
- Irrigated agriculture = 910,883 acres<sup>2</sup>
- In 2018, Arizona's irrigated acres were irrigated 89% with flood/gravity, 16% sprinklers, and 8% drip (multiple systems can be utilized on the same acreage)<sup>3</sup>

#### **Efficiency Considerations**

- Average water application rates in Arizona agriculture = 4.7 acre-feet/acre<sup>4</sup>
  - Water use on gravity/flood: 4.9 acre-feet/acre
  - Water use on sprinkler systems = 3.1 acre-feet/acre
  - Water use on drip systems = 4.2 acre-feet/acre
  - Application rates will vary based on type crops grown, number of crops grown per year, the location and soil type of the farm, etc.
- Canal automation can lead to a 10% increase in delivery efficiency and a 15% increase in crop efficiency<sup>5</sup>

#### Cost Estimates:

- Between \$1,000-\$2,500/acre to install drip systems and between \$1,000-\$1,250 to install sprinklers.
  - Cost fluctuates depending on the type of system, level of automation, and whether a filter system is required
- Canal and Conveyance Lining
  - NRCS estimates that the cost of canal lining can vary between \$10,000-\$58,000 per quarter mile, depending on the size of the canal and the materials used<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> ADWR "Conservation: Agriculture" <a href="https://new.azwater.gov/conservation/agriculture">https://new.azwater.gov/conservation/agriculture</a>

<sup>&</sup>lt;sup>2</sup> USDA National Ag Statistics Service (2018) "2018 Irrigation and Water Management Survey."

https://www.nass.usda.gov/Publications/AgCensus/2017/Online Resources/Farm and Ranch Irrigation Survey/fris.pdf.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Ehler, D., et al. (1990) "The Application of Canal Automation." <a href="https://www.usbr.gov/tsc/techreferences/hydraulics-lab/pubs/PAP/PAP-0568.pdf">https://www.usbr.gov/tsc/techreferences/hydraulics-lab/pubs/PAP/PAP-0568.pdf</a>

<sup>&</sup>lt;sup>6</sup> Hroznencik A., et al. (2022) "A National Estimate of Irrigation Canal Lining and Piping Water Conservation." https://www.nber.org/papers/w30123

#### Agenda Item 7A

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC2-073-2023 – Bonneville Environmental Foundation (Partnering with the Colorado River Indian Tribes (CRIT)) – WCGF – \$3,000,000

#### **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### **PREVIOUS ACTION:**

None

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC2-073-2023 Bonneville Environmental Foundation (Partnering with the Colorado River Indian Tribes (CRIT)) (see supplemental book)

#### **STAFF COMMENTS:**



	ONMENTAL FOUNDATION & COLORADO RIVER UNDERSTRUCTURE Conversion  WC2-073-2023
Grant Amount Requested	\$3,000,000.00
Match Amount	\$2,572,307.20 (Minimum 25% = \$750,000)
Total Project Cost	\$5,572,307.20
Category	Agriculture System Upgrades
Summary	Irrigation infrastructure conversion from flood to cost-effective, water-efficient micro-irrigation on the Colorado River Indian Tribes (CRIT) Farms" is a general water conservation program focused on implementing individual conversion projects within the agricultural areas of the CRIT Reservation - a water conservation program focused on installing micro-irrigation infrastructure, including required water source modifications and N-Drip's gravity-powered micro-irrigation system.
Location	Parker, Arizona, La Paz County
Water Source	
Volume of water conserved (acre-feet)	WIFA Staff Estimated: 60,000 – 341,000 acre feet over the lifespan of the infrastructure (15 years)*  *This is an estimate only intended to be used by WIFA for considering the potential water savings from this grant program. USBR or ADWR may use different methods to quantify changes to CRIT's diversion or consumptive use of Colorado River Water.
Cost per acre foot conserved	\$9- \$50 per acre foot

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4	
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)
	Project Completion: estimated January 2024
project/program	Lifespan Expected Benefits: 15 years



Community information	The Colorado River Indian Tribes include members of the Mohave, Chemehuevl, Hopi, and Navajo nations. Approximately 8,717 people live on the Colorado River Indian Tribes Reservation. The Reservation is nearly 300,000 acres, including 90 miles of river shoreline along the Colorado River, and the primary community on the Reservation is centered in Parker (University of Arizona, Native American Advancement, Initiatives, and Research, 2023).
Costs and benefits of project/program	Costs: \$5,572,307.20, staff time, equipment  Benefits: The conversion from flood irrigation to micro-irrigation leads to many benefits, both environmental and financial, for CRIT and for the greater Colorado River Basin. Micro-irrigation requires less water to be diverted from the river and improved stream flow. Additionally, because the water and fertilizer are directly applied to the plant root through contained laterals, rather than applied by flooding an open field, the N-Drip system allows for nearly zero evaporative water loss on the field as well as little or no fertilizer leaching into the groundwater.  Applicant Reported Water Savings: 5,944 acre feet annually The N-Drip micro-irrigation system saves up to 4 acre-feet per acre annually compared to flood irrigation, with an average 2-2.5 acre- feet per acre.

	FUNDING SOURCES Statutory Evaluation Criteria #3 and #5
Eligibility for LTWAF or WSDF	Applicant states that under the current system, irrigation efficiency and infrastructure improvement projects are not eligible for funding from WIFA's Long-Term Water Augmentation Fund or Water Supply Development Fund. Agriculture is the largest use of water in Arizona, yet the state has no long-term, reoccurring grant opportunities to support the implementation of efficient irrigation practices.
Leverage of multiple funds	CRIT Farms, Bonneville Environmental Foundation (BEF), and N-Drip consistently evaluate potential ways to leverage funds to amplify the impact this revolutionary, water-saving conservation activity can make on the Colorado River Basin. In 2021, N-Drip was awarded a NRCS Conservation Innovation Grant (CIG) to create an irrigation efficiency pilot program to facilitate the conversion of flood irrigated acres.  The CRIT Reservation includes more than 80,000 acres of cultivated agricultural land, and CRIT Farms alone includes approximately 22,000



	acres. CRIT Farms, BEF, and N-Drip hope to use the funding from WIFA to demonstrate to other funding partners the significant scale of the water-saving opportunity that this program could provide.
Source of match funding	Cash Match: \$2,572,307.20  In support of the conservation program "Irrigation infrastructure conversion from flood to cost-effective, water-efficient micro-irrigation on the Colorado River Indian Tribes (CRIT) Farms," BWS has secured \$2.57 million in cash-match funds from corporations interested in supporting CRIT and the tribe's ongoing conservation efforts.

### CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8

The partnership between CRIT Farms, Bonneville Environmental Foundation (BEF), and N-Drip has an established, successful history of managing and executing water conservation programs (including submitting the necessary reporting requirements that accompany grants).

BEF is a global non-profit with extensive experience managing environmental programs around the world related to climate, energy, and water. Sara Hoversten has been with BEF for more than five years and currently holds the position of Director of Business for Water Stewardship. In this role, she oversees the strategic approach and implementation of the program, engages and maintains corporate partnerships, and helps guide the investment in conservation partners.

# Qualifications and capacity of applicant

N-Drip has been awarded more than \$13 million in grant funding from a variety of sources including the USDA, University of Arizona, and private foundations and corporations to install its revolutionary system and help growers conserve water around the US. Seth Siegel, Chief Sustainability Officer, and Katie Hall, Director of Sustainability Research, will work directly with BEF to support the reporting and ongoing communication between the installation team, CRIT Farms, WIFA, and other stakeholders.

The N-Drip team has worked with Josh Moore, Manager of CRIT Farms, and area tenants to install thousands of acres within less than a year. While a global company, N-Drip has a full installation and service



	team located in Parker and more than 30 technicians, including many of its technical leadership, located in Arizona, including:  Uri Segev, VP, Business Development Gil Lanir, VP, Technical Services Clifton Isom, Regional Technical Manager
Feasibility of project/program	Upon formal tribal council approval, the water conservation activity is extremely feasible to complete. CRIT Farms has already selected the fields it hopes to convert, and N-Drip's technical team is ready to begin the installations as soon as funds are awarded.
Public comments	The agricultural community in Parker and throughout the state have been supportive of this conservation activity. Within the last year, growers have been approved for approximately \$10 million from the University of Arizona's Water Irrigation Efficiency Program to be used to convert from flood irrigation to N-Drip's micro-irrigation system. Additionally, the USDA Rural Development Office hopes to utilize its Rural Energy for America program to facilitate the conversion from flood irrigation to micro-irrigation as a solution for water users currently reliant on groundwater.

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

#### **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.



- Full Application
- Budget
- Sustainability Article
- Case Studies
- Agriculture MOU
- N Drip Irrigation Study

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

#### Agenda Item 7B

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-004-2023 – Buckeye Water Conservation and Drainage District – WCGF – \$3,000,000

#### **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

#### **PREVIOUS ACTION:**

None

#### **STAFF CONTACT:**

Lindsey Jones

#### **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-004-2023 Buckeye Water Conservation and Drainage District (see supplemental book)

#### **STAFF COMMENTS:**



# BUCKEYE WATER CONSERVATION & DRAINAGE DISTRICT, Irrigation District Modernization and Water Storage Program: Phase I Diversion Intake Structure Modernization and Canal Energy System (CES)

WC1-004-2023

Intake Structure Mod	ernization and Canal Energy System (CES)
Grant Amount Requested	\$3,000,000.00
Match Amount	\$750,000.00 (Minimum 25% = \$750,000.00)
Total Project Cost	\$10,149,472
Category	Agriculture System Upgrades
Summary	This project is divided into two major tasks. The first task will remove, modernize, and upgrade the existing concrete diversion intake structure on the Gila River with a new concrete diversion structure with Rubicon Gates and SCADA controls. The project also includes a new sluicing structure to move and sluice sediment and trash from the headwork gates and provide efficient diversion of river flows. In addition, the second task on the project includes about 600 lineal feet of concrete canal lining and a Canal Energy System (CES) that includes canal inline micro hydropower and canal spanning solar panels.
Location	City of Buckeye, Arizona in Maricopa County
Water Source	□ Colorado River □ Groundwater □ Other (Gila, Salt, Verde)  On average, the BWCDD diverts about 151,381 acre-feet of water per year and their water sources include surface water, treated effluent water, and groundwater. Their water supply includes 54 wells (43%), surface water from the confluence of Gila Rivers and smaller tributaries (Salt, Verde, Agua Fria Rivers) (39%) and the City of Phoenix CAP Effluent Water and other effluent water (18%).
Volume of water conserved	<b>WIFA Staff Estimated:</b> 221,000 - 331,000 acre feet over the lifespan of infrastructure (50 years)
Cost per acre foot conserved	\$9- \$14 per acre foot



CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4	
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)
Duration of project/program	Project Completed: Within 2 years, August 2025  Long term benefits Timeframe: The Main Canal Check structure, irrigation turnout structures and appurtenant features, and the spillway structure have a design life of 50-years as they are engineered and constructed to regional irrigation standards.  The canal liner and flow control gates and controls have a design life of
	25-years. Therefore, the applicant suggests the expected duration of the activity is 25-years and 50-years respectively depending on the project element from date of installation based on the project element.
Community information	Population of 101,315 (2021 census)  Because of its ethnic minorities, poverty level and rural location, this area of Maricopa County is historically underserved, rural, low income and disadvantaged. Urban sprawl from Phoenix and influx of new residents (40% increase in 20 years) has caused a large disparity between income, poverty, unemployment, and subsequent quality of life. These people typically feel the extremities of climate change first, having to choose between the water bill, air conditioning, or food and even receiving lower quality water. Public health and safety will improve by better management of water, improved deliveries, and efficient water use.
Costs and benefits of project/program	Benefits: Energy savings associated with water conservation are quantifiable. Water conserved will result in a direct proportional amount of reduced groundwater use and associated pumping and energy use. These reductions in demand will also reduce the load on the Federal Hydro Power System affected by the drought.  Based on estimated conservation values the modernization of the diversion structure will result in the savings of about 7,569 acre-feet of water annually, or about 378,450 acre-feet over the 50-year life of the Water Conservatory.  Groundwater pumping accounts for about 56% of the water supply therefore at a cost of about \$9.76 dollars per acre foot this results in a



reduction of energy consumption of about \$41,373 annually to pump 4,239 acre-feet, or about \$2.1 million over the life of the augmented storage project.

Ancillary benefits of the project include reduced operational and maintenance costs to the District, improved water management, and better service to farmers for increased on-farm efficiencies. Conservation of water both surface and groundwater helping both Lake Mead and the local groundwater aquifer. Improvements will also help with planned expansion for use of recycled and treated effluent waters in the future, that will help with the overall water balance and reduce demands on CAP and groundwater.

**Applicant Reported Water Savings:** 16,639-24,974 acre feet annually Applicant estimates that energy generated from the Phase I installation will directly offset about 11.05 ac-ft of water consumption, calculated based on the APS energy mix annually.

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF	Applicant does not mention the LTWAF or WSDF funding other than it cannot take on more debt at this time.
Leverage of multiple funds	The District has actively been seeking aid for Capital Improvement Funds from the Bureau of Reclamation, with a total of three grant submissions in which the District has been awarded two of the three. One of the awarded grants is the WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year 2023 which is helping to fund Phase I – Diversion Intake Structure Modernization and Canal Energy System (CES) of the BWCDD System Modernization Program, funding level of \$5 million dollars. The overall project budget for Phase I is \$10,149,472. The District's responsibility for the Federal cost share is \$5,149,472 and is requesting \$3 million dollars for the Phase I program so they can leverage the Federal funding source. The District would fund the remaining \$2,149,472 with internal funds.
Source of match funding	District funding and USBR grants (see above)  In kind services are envisioned to include planning, design, construction support, and construction inspection activities. Applicant included resolution authorizing the use of \$750,000 of cash and in-kind match for this program.



CAPACITY, FEASIBILITY, & PUBLIC COMMENT  Statutory Evaluation Criteria #6, #7, and #8	
Qualifications and capacity of applicant	BWCDD is the Project Owner and will serve as the contact point for coordination with WIFA, Contractors, and Engineer. BWCDD labor resources will be utilized for the specific tasks during the approximate 2-year project duration.
	The construction and installation will be done by a pre-certified qualified and selected Contractor through BWCDD construction bidding process. The Engineering will be done by George Cairo Engineering, Inc. (GCE), and GCE will also provide support services during construction.
Feasibility of project/program	The applicant reports that the project is 100 percent feasible. Applicant states they have the labor resources to commit to the project and have a commitment from the engineer to support this imperative program.
Public comments	BWCDD has ranked the proposed project high in their current SOR plan for water management due to its location, spill volume, and prioritization indexing. This project and funding has also been approved by the BWCDD Board. The board and the BWCDD Users are 100 percent supportive of this priority project to continue to improve the irrigation system.
	The local farming community is in support of the proposed Water Conservation Activity. Applicant has included letters of support in the application packet.

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.



The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

#### **Attachments:**

- Full Application
- Resolution Letters & Letters of Support
- Budget
- Buckeye Boundaries Map
- Project Map

## **Evaluation Criteria Statutory Reference:**

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

Recommend Approval of Grant Application with Modifications

# Agenda Item 7C

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-024-2023 – Maricopa Water District – WCGF – \$222,786

# **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

# PREVIOUS ACTION:

None

## **STAFF CONTACT:**

Lindsey Jones

# **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-024-2023 Maricopa Water District (see supplemental book)

## **STAFF COMMENTS:**

None



MARICOPA WATER DISTRICT, Beardsley Canal Flume and Control Gates Improvements Project  WC1-024-2023		
Grant Amount Requested	\$222,786.00	
Match Amount	\$63,000.00 (Minimum 25% = \$55,696.50)	
Total Project Cost	\$285,786.00	
Category	Agriculture System Upgrades	
Summary	Project work activities:  Beardsley Canal Flow Measurement Flume Construction  Complete planning and engineering.  Mobilize equipment and materials onsite for ram construction.  Coordinate a water outage period with district op linetall dirt plugs for nuisance water.  Sawcut existing lining and prepare subgrade.  Build forms for ramp flume.  Concrete placement and materials testing.  Removal of forms and hand place lining transition flume and existing lining.  Real joints and install flume gauge.  Commission and approve ramp flume.  Canal Gate Replacement	p flume perations.
Location	Surprise, Arizona in Maricopa County	
Water Source	□ Colorado River □ Groundwater □ Other (Agua Fria River)  MWD's gravity-fed delivery infrastructure consists of the Canal, which conveys water from Lake Pleasant throug with the Central Arizona Project, and approximately 100 distribution laterals and sub-laterals made up of concre pipelines. Forty-nine active wells are located throughout connected to the ditch and pipeline distribution system. water source is groundwater pumped into the canal system.	th an interconnect of miles of the ditches and the district and A supplementary



Volume of water	WIFA Staff Estimated: 150,000- 350,000 acre feet over lifespan of
conserved	infrastructure (50 years)
Cost per acre foot	~\$1 per acre foot
conserved	~\$1 per acre root

CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4	
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)
Duration of project/program	Project Completed: Installed by February 2024 Long term benefits Timeframe: 50 years
Community information	Population: 500k+  MWD's Beardsley Canal has become a very important conveyance canal delivering water to the newly expanded White Tanks Regional Water treatment plant that delivers 33 MGD of potable water to west valley residents within the cities of Surprise, Glendale, Goodyear, and Buckeye every day.  The district also provides non-potable water deliveries to Sun City, the City of Surprise Spring Training baseball facilities that are home to the Texas Rangers and Kansas City Royals, and multiple other developments including schools and subdivisions above and beyond their agricultural deliveries.
Costs and benefits of project/program	Costs: estimated to be about \$285,786,00  Benefits: The upper area of MWD's system is south of Lake Pleasant and includes the lake where their water is stored. Lake Pleasant is home to many ecosystems, one of which being the Arizona Wild Burros. Environmentally, all efforts made to conserve water in the MWD system directly benefit conservation and protection of the Colorado River Project.  In addition to conserving water that can remain behind Lake Mead and all those environmental ancillary benefits, being able to reduce leakage and seepage from the MWD canal system works to reduce the abundance of noxious weeds that take over open areas of the District. Noxious weeds not only consume water that can be used for irrigation crops, but they steal nutrients that crops, and Irrigation workers must make extra efforts to remove these weeds, requiring driving on canal



banks, along with burning of weeds affecting air quality. Not only will flow control gates help with the conservation of water, but they will also result in minimal use of vehicles on site, minimizing dust/air pollution, and the use of fossil fuels.

The Colorado River is home to a myriad of endangered species, and benefits species that are vital to the sacred desert ecosystem. Species such as the Gila Topminnow and Spike dace fish, which are endangered species that reside within the boundaries of Pinal County will reap these conservation efforts made by MWD.

**Applicant Estimated Water Savings:** 3,000 acre feet This is broken down as follows; about 600 acre-feet conserved with the gate replacements, and about 2,400 acre-feet conserved from reduced system spills with the flow measurement flume installation.

FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF	The Applicant states they are in a depressed economic condition and with the many challenges facing the District cannot afford to take on financial debt and needs to find ways to leverage their limited funding to accomplish their goals of being good stewards of their water resources.
Leverage of multiple funds	
Source of match funding	Cash and In-Kind Match: \$63,000.00.  In-kind services are envisioned to include planning, design, construction support, and construction inspection activities. Applicant did not breakdown the cash match vs. in-kind match.



CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8	
Qualifications and capacity of applicant	The District is managed by Glen Vortherms, an engineer who will be responsible for oversight of the Water Conservation Activity for the District, and the requested WIFA grant.  Construction activities will be performed by the District operation and maintenance staff, or certified contractors that are experienced in the requirements of this project, including the removal and installation of canal gates and canal lining. Other work like flume construction and canal gates replacement will be completed by a certified contractor.  The District has historically used and will utilize George Cairo Engineering, Inc. (GCE) a local irrigation and water resources firm regionally recognized as experts in flow measurement, design, and modernization of irrigation systems. GCE will complete the technical services to include planning, design, and construction management. Work will be completed under the direction of George Cairo, Principal Engineer, and engineer of record for the District.
Feasibility of project/program	Applicant states that the project is 100 percent feasible and has been approved by Board Resolution. If approved for funding of the proposed Water Conservation Activity the District will be able to complete the work upon grant execution and notice to proceed from WIFA.
Public comments	Applicant shares that the local farming community is in support of the proposed Water Conservation Activity.

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.



The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.

### **Attachments:**

- Full Application
- Budget
- Internal Budget
- Resolution 23-05
- EPCOR Letter of Support
- AZ Water CO Letter of Support

## **Evaluation Criteria Statutory Reference:**

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

Recommend Approval of Grant Application with Modifications

# Agenda Item 7D

#### **AGENDA ITEM:**

Recommend Approval of Grant Application WC1-026-2023 – New Magma Irrigation District – WCGF – \$187,752

## **ACTION REQUIRED:**

Review, Discuss & Recommend Approval

## PREVIOUS ACTION:

None

## **STAFF CONTACT:**

Lindsey Jones

## **ATTACHMENTS:**

- Water Conservation Grant Fund Evaluation
- Grant Application WC1-026-2023 New Magma Irrigation District (see supplemental book)

## **STAFF COMMENTS:**

None



NEW MAGMA IRRIGATION DISTRICT, Upgraded Flow Control Gates and Turnout Valves Project  WC1-026-2023		
Grant Amount Requested	\$187,752.00	
Match Amount	\$62,500.00 (Minimum 25% = \$46,938.00)	
Total Project Cost	\$250,252.00	
Category	Agriculture System Upgrades	
Summary	Project consists of:  Structure Flow Control Slide Gate Replacement – NMID Lateral A System, A-5 Turnout gate 34-inch, A-6 gate 38-inch, NMID Lateral C System, C-Main Double (2) 42-inch, NMID Lateral D-System, D-1 Turnout Gate Continuation Gate 36-inch  Canal Liner Repairs The canal liner repairs include the removal and replace 360 lineal feet of concrete liner panels.  24-Inch Butterfly Valve Replacement- Existing pump disconveyance pipeline flow control valves.	Continuation Gate 36-inch, D-5 ment of about
Location	San Tan Valley, Arizona in Pinal County	
Water Source	<ul> <li>☑ Colorado River (CAP)</li> <li>☑ Groundwater</li> <li>☐ Other</li> <li>The district is also working to develop reclaimed and trewater supplies. The proposed conservatory activities with management of these water supplies that will directly all preservation of groundwater and reduce reliance on available from the CAP.</li> </ul>	ill aid in better llow the
Volume of water conserved	WIFA Staff Estimated: 65,000-466,000 acre feet over infrastructure (50 years)	lifespan of
Cost per acre foot conserved	~\$1 per acre foot	



CONSERVATION ACTIVITY BENEFITS AND RESULTS  Statutory evaluation criteria #1, #2, and #4	
Activity Type	Programs and projects that reduce water use Per A.R.S. 49-1332(B)(2)
Duration of project/program	Long term benefits Timeframe: 50 years design life
Community information	Population: 104,936 is the total San Tan Valley population.  New Magma Irrigation District is home to many low income and rural communities, which also includes the Hispanic population of 37.2% and Tohono O'Odham Indian Communities that are split to make up Gila River Indian Community and Salt River Indian Community. These low-income communities that are major consumers of irrigation water are historically being considered less than equal as agricultural workers, which in turn causes economic poverty, increased substandard housing rates, and an increase in generational health issues such as diabetes as shown in the attached table.
Costs and benefits of project/program	Costs: \$250,252.00 approximately.  Benefits: reduced operational and maintenance costs to the District, improved water management, better service to farmers for increased onfarm efficiencies. Conservation of both surface and groundwater helping Lake Mead and the local groundwater aquifer. Improvements will also help with planned expansion for use of recycled and treated effluent waters in the future, that will help with the overall water balance and reduce demands on CAP and groundwater.  Applicant claims all efforts made to conserve water in the NMID system directly benefit conservation and protection of the Colorado River Project. This will provide more water to downstream users.  Applicant Calculated Water Savings: 1,300 acre feet annually This is broken down as follows: about 550 acre-feet conserved with the gate replacements, about 600 acre-feet conserved with the valve replacements, and an additional 50 acre-feet conserved from the liner repairs.



FUNDING SOURCES Statutory Evaluation Criteria #3 and #5	
Eligibility for LTWAF or WSDF	The New Magma Irrigation District is in a depressed economic condition and with the many challenges facing the District applicant states they cannot afford to take on financial debt and needs to find ways to leverage their limited funding. Without cost share funding support from WIFA the District cannot complete the proposed project.  The Applicant has not specifically mentioned LTWAF or WSDF.
Leverage of multiple funds	The District does not have a history of applying for grants and funding opportunities. The District does plan on applying due to the need for upcoming Federal NOFO opportunities and it is their hope in the future to
Source of match funding	Cash and In-Kind Match: \$62,500.00  All funds for the WIFA grant matching requirements will be paid directly with New Magma Irrigation District funds, and District in-kind services. In kind services are envisioned to include planning, design, construction support, and construction inspection activities.  There is no specific breakdown of how much cash vs. in-kind services.

# CAPACITY, FEASIBILITY, & PUBLIC COMMENT Statutory Evaluation Criteria #6, #7, and #8 The New Magma Irrigation District established under Arizona State Water Code serves about 16,900 acres, consisting of a system of canals, pipelines, wells, and irrigation structures. All facilities are maintained and operated by the District. The District operations and maintenance are managed by Shelton Van Allen who will be responsible for oversight of the Water Conservation Activity for the District, and the requested WIFA **Qualifications and** grant. capacity of applicant Construction activities will be performed by the District operation and maintenance staff that are experienced in the requirements of this project, including the removal and installation of canal gates and pipeline valves. Other work like canal lining replacement will be completed by Innova Water Construction, LLC, (INNOVA), an Arizona based firm that specializes in irrigation district related works.



	The District has historically used and will utilize George Cairo Engineering, Inc. (GCE) a local irrigation and water resources firm regionally recognized as experts in flow measurement, design, and modernization of irrigation systems. GCE will complete the technical services to include planning, design, and construction management. Work will be completed under the direction of George Cairo, Principal Engineer, and engineer of record for the District.
Feasibility of project/program	Applicant states the project is 100 percent feasible and has been approved by the Board. The District has coordinated with vendors for the purchase of the gates and valves which are long lead items to have readily available within the planned timeframe. Also concrete for the liner repairs is now readily available with the recent fly ash shortage issue locally resolved. The District has the labor resources to commit to the project and has a commitment from the engineer to support this important project.
Public comments	Applicant reports the local farming community is in support of the proposed Water Conservation Activity. Letters of support are attached.

The Applicant has a current SAM.GOV UEI which allows them to apply for federal funds. The applicant has completed all steps in the grant application process and is requesting funding for a program that is acceptable under the regulations.

# **Expenditure Code 5.8 Clean Water: Water Conservation**

ARPA Final Rule (31 CFR Part 35 RIN 1505–AC77) defines water infrastructure projects as "eligible projects under the Clean Water State Revolving Fund." "A project shall meet the criteria of CWSRF eligibility found in Section 603(c) of the Clean Water Act (CWA)". Specific Expenditure Codes were created to define activities available under the water infrastructure category.

The Interagency Service Agreement (ISA-ARPA-WIFA-070122-01) between the State of Arizona, Office of the Governor and WIFA required the project / program be specific to Expenditure Code 5.8 Clean Water: Water Conservation.

WIFA staff find this project / program is consistent with Expenditure Code 5.8 Clean Water: Water Conservation as determined in Section 603c of the Clean Water Act (CWA) and the ISA.



# **Attachments:**

- Full Application
- Budget
- WIFA NMID LET Commitment & Letters of Support
- TAB NMID Budget Table
- TAB NMID Disadvantaged Community Variables Table

#### **Evaluation Criteria Statutory Reference:**

# 49-1334. <u>Evaluation criteria for water conservation programs and projects from the water conservation grant fund; procedures</u>

The authority shall determine the order and priority of water conservation programs and projects proposed to be funded in whole or in part with monies from the water conservation grant fund based on the following, as applicable:

- 1. The extent to which the water conservation program or project achieves one or more of the results prescribed by section 49-1332, subsection A.
- 2. The costs and benefits of the water conservation program or project, including environmental costs and benefits.
- 3. If the water conservation program or project is eligible for funding from the long-term water augmentation fund established by section 49-1302 or the water supply development revolving fund established by section 49-1271 and if the nature of the water conservation program or project makes funding from the long-term water augmentation fund or the water supply development revolving fund impractical.
- 4. The ability to provide multiple benefits.
- 5. The degree to which the water conservation program or project will maximize or leverage multiple available funding sources, including federal funding.
- 6. The qualifications and capacity of an applicant.
- 7. The feasibility of the water conservation program or project.
- 8. Public comments.

#### **WCGF Committee Evaluation:**

Recommend Rejection of Grant Application

Recommend Approval of Grant Application

Recommend Approval of Grant Application with Modifications